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ARMY REFORM: THE NECESSITY FOR AN ADVISORY BOARD.

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Monday, 10th June, 1901.

Captain Sir J. COLOMB, K.C.M.G., M.P. (late R.M.A.), in the Chair.

IN a paper read before this Institution on the 20th February last, I wittingly dealt with three subjects, upon which Army reformers might be invited to dwell.

The first of these refers to some developments in the art of war, arising out of the lessons in warfare of the past century, and the problems that present themselves.

The second deals with the subject of the present paper. And the third with national organisation for Imperial defence.

At the suggestion of your Council, I have the honour to-day to lay before you some considerations as to my second subject, instead of taking them, as I should have preferred, in the above order.

The Establishment of an Advisory Board.—In the above-named paper the establishment of an advisory board was advocated in the following words:—"Until the nation tells Parliament that it must have real efficiency in return for what it pays; until Parliament realises that no professional responsibility is at present possible, and that it cannot be had until an independent board or body to advise them is created, then only can the nation be sure of knowing what is wanted."

Men Available.—Is there any question that we possess men whose lives have given them the necessary experience and who are qualified to consider the military situation in all its aspects, and to advise? Is there any question that our leaders, whether trained in the Navy or Army, have opportunities for gaining practical experience and of applying the same, second to no other nation? Are there not men, whom we could all name, in either

profession, who have given evidence in their career, of the highest qualifications in respect to knowledge, the power of applying it, and of drawing just conclusions for the guidance of a Legislature, as to what it is incumbent on them to do in time of peace, to ensure as far as possible the successful issue of war? And for everyone we could name, is there the least doubt we have many others, who, yet having these qualifications in the fullest degree, have, by the accidents of promotion, been unable publicly to prove their possession?

If made Available.—It will naturally be asked, why do I assert, if this is the case, that the services of public men in every way qualified and ready to render such essential service to their country, are not made available? The only way to pursue the enquiry and to challenge discussion as to its accuracy, seems to be to try and investigate the underlying conditions.

The Amateur Influence Preponderant.—There is perhaps no country in the world in which the opinion and judgment of the amateur on the evidence of the so-called expert are more sought, by means of commissions, committees, enquiries, and through discussions in the papers and journals, and less (in proportion) adopted or made use of.

This is exemplified in the system inaugurated by the Limited Liabilities Acts, by which the existence of boards of directors, mostly amateurs in the work of which they direct the expenditure, relieves the expert, upon whom the administration depends, of the sense of responsibility necessary to secure efficiency.¹

Of course, it is not always so, but millions of money have been wasted by it in civil life.

The reader of the evidence before many enquiries, Parliamentary or otherwise, conducted largely by amateurs, is struck by the waste of time and mystification as to facts, which invariably arises out of the attempt on the part of the various minds in the enquiring body to arrive at the truth; no doubt with the best intentions to elicit and to deal with the evidence appropriate to the subject under enquiry, but generally ending in a report which is chiefly characteristic of compromise.

Herein lies one of the reasons, why, after training men in war, we relegate to the retired unemployed, and to the so-called "fossil" stratum, brains which have reached the period of their greatest value to the State, because, the men who are past-masters of any subject are always the cause of offence to the amateur.

The Views of a Great Statesman.—At the end of the debate on Wednesday, the 6th March last, in the House of Lords, Lord Salisbury, in summing up, is reported to have said it "always seemed very strange that things which appear evidently to the professional member of very small importance, appear to me to be of considerable importance," and

¹ One does not like to go abroad for an example of common sense, but is there anything more sensible than the German system, by which the highest selected and paid talent is made entirely responsible for the management of the work of joint stock companies, and the (so-called) board of the company meets only periodically to test the results?

vice versa.¹ He is reported to have added that the Armies of France, or America, or Germany, or Russia, exist under entirely different conditions, namely, that with us "the Army is under Parliament," and that with us "the Minister who controls the Army does it as one who is responsible to Parliament and represents all the authority which Parliament possesses."

In this statement lies, to some extent, the only reply—if it may be called one—to some questions I asked in my previous paper on Army Reform, namely:—"Where does there exist in our Constitution any individual or body charged with responsibility to the nation to advise authoritatively, apart from all questions of party politics, and finance, as to the military (Army and Navy) requirements of the Empire?"

"Can a War Office, ruled by a party Minister, be independent of party politics or considerations, and can the whole truth ever reach the ears of Parliament and of the country through him?"

"Can a so-called Defence Committee composed of civilians, whose minds have never been trained to war, and who exist only by the support of a Parliamentary majority, be trusted for one moment as competent advisers?"

The Wolsley debate this season, in the House of Lords, brings into strong light some of the conditions of our system which must be taken into consideration.²

That debate drew aside for a moment a curtain and exposed a situation from which the country can learn a useful lesson.

We had the late Commander-in-Chief, with knowledge and experience vouchsafed to few, forced by the very circumstances of the position to tell the world, as a Peer of the Realm, that there is no means in this country by which military expert opinion is brought into direct touch with the minds of the people. He was necessarily led on to give practical examples of the effect of this want of continuity, and also to explain how it had affected his actions in the past. On the other hand, we had the exhibition of an able politician brought up in the strictest doctrines of ministerial responsibility, the outcome of a century's practice, defending a position altogether untenable from the common-sense business point of view, and only justified in the same way as so many illogical modes of procedure in this strange country become logical.

¹ Lord Eustace Cecil, in his evidence before the Royal Commission of 1887, said: "It is a very difficult thing to define what is military and what is civil." If he could look upon everything which affects the preparation for war, as military, "the scale would fall from his eyes."

² Lord Wolsley only emphasised the evidence in 1888 before the House of Commons Select Committee of H.R.H. the Duke of Cambridge, namely:—"I am only responsible for the estimate of 'what we ask for.' . . . The allocation is dealt with by the Secretary of State, according to what money he thinks he can give. . . . I cannot consider myself responsible for an estimate which might be cut down. . . . I have not the least objection to take any responsibility, but then nobody must interfere with what I put in, if I am to be responsible. . . . If an estimate that is handed in by the Commander-in-Chief goes to the public, and the Secretary of State afterwards thinks it right to modify it . . . then I am quite ready to take the responsibility," etc., etc.

There is no reason to doubt the usefulness of the lesson to be learnt from that debate, because the remedy indicated during its course was difficult—perhaps impossible—of attainment. One thing suggested itself, namely, that the responsibility of the Commander-in-Chief might be expressed in some such terms as those which the late Limited Liability Companies Act has prescribed for the wording of the certificate which the auditors have to attach to the annual balance sheet of a public company. Fancy, the Commander-in-Chief furnishing the Government each year, for submission to Parliament, with a certificate of the offensive and defensive condition of the Empire, which must expose all that is defective; and yet something of the kind is absolutely necessary if there is no other change.

The alternative is to take the public, *i.e.*, Parliament, into your confidence, and the consequent need of an Advisory Board to assist the Legislature.

The Civilian View.—The question of the present civilian influence over the military executive should be approached very tenderly, because most of the civilians who believe they understand an army in war, seriously and honestly believe they do, whereas they only understand one in peace.

Questions in Parliament.—Even the spurious form of so-called patriotism, which induces some Members to ask more or less resultless questions in Parliament, has its useful side. If the man is honest in his desire to learn, he cannot be in a better rough-and-ready school. I do not, of course, include those who only wish to embarrass and make mischief.

Every year the proceedings at "question time" point to the necessity for the country to decide that all questions affecting the defence of the Empire and the economy of our forces, naval and military, should be dealt with *in camera*, *i.e.*, by a Standing Committee assisted by an Advisory Board.

Those who are in earnest, and are not advertising themselves and playing into the hands of the country's enemies, will still obtain all the information they are entitled to have. A large number of serious Members of Parliament, in both Houses, will be enlightened, and even educated, in these all-important questions, and the inducement to give those questions a party character will be reduced to a minimum.

These questions and answers, which must often inspire the members of the combatant forces with indignation, and which do incalculable harm in various ways and little good, would no longer be published in the newspapers.

I would here, with great deference, give one example of the absolute inappropriateness, to say the least of it, of publicity of statements that may fall from the lips even of the highest civilian authority when dealing with purely technical military questions. On 2nd April last the Secretary of State is reported by the *Times* to have said, in reference to the dispensing with Courts of Inquiry—a subject which goes very deeply into the foundation of discipline, *esprit*, and true devotion to duty—"He

was sure the House would support him when he said that the life of any soldier was at the mercy of the officer under whom he was placed, and it was necessary the military authorities should have full power in this respect—namely, to exercise power to dispense with an officer's services without a court of inquiry."

The harm of the discussion lay, not in the desire of Parliament to secure justice in every case for every individual public servant, nor in the explanation of the views of the Secretary of State, but in the fact that next morning everyone could read such a statement in the public papers—a statement which, if his words are interpreted in a military sense, is unprecedented, in the conclusions which may be drawn from it, as to an officer's responsibilities, under conditions which have no parallel in civil life. If the practical Chief of the Army could be relieved of the necessity of making statements in public, the meaning of which cannot be carefully studied beforehand, he (I should say) would be the first to rejoice.

Party Government.—Underlying all the study of my subject is our system of Party Government, which is, after all, an expedient to counteract the evils of human fallibility. I start from the position that we *must* accept this system, however bad its influence may be on the control of a Navy and Army. The whole business is a game. The Defence of our inheritance is too important a matter to be played with.

The amateur element is emphasised. The professional knowledge of the Crown is largely paralysed. The military element in Parliament is uninfluential and relegated to a back seat. Even Lord Wolseley, who is the first member of the House of Lords who, since the Duke of Wellington's time, spoke authoritatively from his seat as a Peer, received more criticism than encouragement.

Seat of Control of the Army.—The only control of the Army that we can identify is the constitutional control of the Secretary of State for War. Since General Peel's time, the average tenure of office by the civilian Secretary of State (Colonel Stanley excepted) has been 2½ years. The Under-Secretary of State and the Financial Secretary cannot have an experience of a more extended kind. Then, on the military side, the Commander-in-Chief, the Adjutant-General, the Quarter-Master-General, the Inspector-General of Fortifications, and the Director-General of Ordnance, are all appointments of five years' duration. It is, therefore, absolutely undeniable that the real control of the Army falls (unavoidably) on the shoulders of the permanent civil officers of the War Department, who are practically irremovable.

Thus, if the Crown and Parliament, on behalf of the Empire (whose servants they are) wish to trace to its seat the real responsibility, they must go to the permanent chairs of the War Office Civil Staff.¹

¹ Mr. Strong's evidence on the War Office in 1887:—"I think it would be better if an officer remained longer than five years, for no sooner has he got to learn his work well than off he goes, and another staff officer comes in, and then he has to be taught as a matter of course; or, if I am using too great a word in saying 'has to be taught,' has to be put in the right groove by civilians who are permanent."

If it is not easy for the professional soldier to keep always before his mind, as a guide to his procedure in time of peace, the one object for which alone he exists, namely, warfare, how can men who are purely civilian be expected to deal with the military machine, except as one which has to be run in time of peace, so as to ensure economy in the first place, its efficiency or readiness for being put to work under problematical conditions taking the second place?

Civilian and Military Responsibility.—To repeat what I said in my last lecture, I assert emphatically that our Civil Service contains business men second to none in the world; but, if it is required that the sailors and soldiers, who are to be made responsible for the results of warfare and battle, must have limits placed on their personal responsibility in time of peace, then the present system requires the application of a remedy. Some sailors and soldiers, who have not been satisfied to remain amateurs (as too many do under our system), should be the responsible advisers in time of peace in preparing for an eventuality which "only occasionally, and generally suddenly arrives, and which, when it does arrive, appears in a form and from a direction, perhaps, quite different from the one that has been anticipated." Unfortunately, at present we have nothing of the kind.

Provision to Compensate for Difficulty.—Now it is vital to the value of the insurance premiums which the country annually pays, that, if the present system cannot under any form of Government be altered, some compensation should be provided to counteract the effect of the inevitable evil consequences, of which the experiences of the last century give us many and varied examples.

Added to this, it is vital to the safety of the Empire that this provision should include something for which (outside the so-called Defence Committee of the Cabinet) little has as yet been done, namely, a permanent intimate relationship between the Services for the consideration and recommendation of measures which embrace both naval and military conditions.

It is to advocate this compensation, this counter-acting influence, that I am again before the Institution.

To repeat, if the Constitution, as administered by the Crown and Parliament, does not permit of our military forces being placed absolutely under professional control responsible directly and solely for engagement, preparation, training, organisation, execution, and expenditure, as is the case in all other businesses and in ordinary affairs of life, and, as is also the case with the conditions of the position, for instance, of the Sirdar of the Egyptian Army,¹ and largely with the Indian Army;

¹ Our Army system in India is more like the French, namely, a War Minister, who in matters which concern preparations for war, is assisted by a council, which meet once a month, and *must* be consulted by him on certain definite subjects of first importance.

The German system is a good example of the existence of a War Minister, who directs the administration and is responsible for the organisation of the Army, and of whom the General Staff and the Military Cabinet are independent, showing that the existence of independent advice, which has nothing to do with expenditure, need not militate in any way against the efficiency of Army administration, by a Secretary of State for War, associated with a Commander-in-Chief of the King's Forces.

if it is necessary that the Services upon which our existence as an Empire must ultimately depend, must be controlled, directed, and administered, by unprofessional civil permanent servants of the State, then let us have an outside body composed of our greatest, best tried, and proved sailors and soldiers, who shall be :—

- a. Absolutely independent of Parliamentary parties as are the members of the Judicial Bench.
- b. Who shall have nothing to do with administrative or executive (War Office and Admiralty) duties.
- c. Whose duty it shall be to gather and bring within their ken all information as regards our Army and Navy, and all the forces for offence and defence of any part of the Empire, with all about their surroundings, whether existent or possible, and similarly of the forces of other countries.
- d. To study all the conditions and all the possibilities of war within and around the Empire, and, as it were, to live always as if war were imminent and always just beyond the political horizon.

In Presence of Burning Questions.—It is obvious, to anyone who will take the trouble to think, that such a body would be the first to enter the presence of questions, which to many of us, who have always been thinking of these matters, are burning ones.

Further on I will give examples of these questions, how they would impress this advising body, and how that body would deal with them, *vis-à-vis* of the legislature.

Constitution.—There is one thing that must be clear, and that is, that the men who form that body will have spent their lives in the Services, and thus have become perfectly familiar with their working, and that they will have come to appreciate the difference between a day's work in administrative duties full of details arising more out of peace conditions rather than those appertaining to war, and a day (or a week) passed in calm and deep deliberation on subjects fundamental to the military protection of this vast Empire.

Further, they will, in the first place, waste no time in the consideration of that which is unpractical, which is an amiable failing of the amateurs civil and military; and, in the second place, they will have no responsibility for organisation, direction, supervision, or even inspection, unless specially and exceptionally called on to inspect.

I have no hesitation in saying, after many years of watching and studying the daily life of men engaged in the official life of our spending departments, that a large majority rarely have time to ponder seriously, on whether their work is more suitable to times of peace or of war, and still less whether what they are doing is conducing in any way to practical success in warfare. It is not to be wondered at.

Peace Conditions of Army.—Would not an engineering manager and all the employees of a great central electric light station, for instance, get rusty and out of training if after such an establishment had been built and equipped, and even tried on an artificial load and found theoretically

perfect, it had to stand still until, some day, at a moment's notice, the real load was put on, and the supply of electric energy to a widely surrounding district was suddenly started in practice?

Peace Conditions of Navy.—Fortunately for our Navy, their lives are practically passed in battling with the same elements of Nature in peace as in war, the scene of their operations, if warfare breaks out, is the same spherical plane surface and has the same surroundings with which they, in time of peace, are always cultivating a thorough acquaintance.

The unit is the war-ship in its various sizes and classes, and the study of its adaptability and improvement can be always going on.

Conditions in Common.—The modifications of all these conditions, in the case of land warfare, is a study, which alone requires time.

The men composing the advising body, which I have suggested, would be entirely at home in this study, and would be the only safe guides to the nation in considering the area of ground, in common, and not in common, to the two Services, and in laying down the definition of the scope of combinations for securing the most perfect mutual co-operation.¹

I hope I am perfectly understood.—My proposal is the creation of a body which does not at present exist.

It is admitted that such a body may be called a large interference with the existing arrangements for the governing of the Empire. To repeat, it is not that there is any doubt, that the autocratic direction and control of our Navy and Army for purposes of defence and offence, or offence and defence,² whichever you like, subject to the Royal authority and prerogative, is a thousand times the best, but it is certain that in its most practical shape it is impossible with our Constitution or form of Government.

An Expedient.—This new body must be regarded only as an expedient, but still it must be a permanent one—to correct the utter inadaptability of our governmental system to the production of practical results in the preparation for war.³

Our present arrangement is one founded on, and existing on, what we shall always have with us, namely, anti-militarism. It is a system, which, the moment it is in presence of military questions, is utterly at fault, unpractical, extravagant, and unbusinesslike.

¹ This co-operation is, of course, very different from the sort of intercourse which, for instance, exists between the office of the Inspector-General of Fortifications and the Navy for minor and local questions connected with coast defence, by the practice of attaching an experienced naval officer for duty with the fortification side of the War Office.

² I do not like the words "offensive defence," but if I use "defence" only the soldiers think I imply "passive defence." If I use "offence," the peace-at-any-price people misunderstand.

³ There is nothing here which conflicts with Mr. Spenser Wilkinson's words in "The Management of the Home Army," in his "Imperial Defence." "The first requirement of a sound system is a general who can be entrusted with the duty of advising the Cabinet upon the conduct of wars and with the actual management of a campaign. To have such an officer is indispensable, for it is an elementary truth that war cannot be well conducted by a committee."

It has bred up in the minds of our public men a manner of thinking, which was sometimes voiced last year, when one heard the remark, "I suppose we shall blunder through somehow."

It breeds up in the masses of this nation either a spirit of indifference, of a false sense of security, or of passionately helpless indignation: all preludes to a decay of that utilisation of experience and honesty of purpose, of which we have plenty, which alone should guide the leaders, and give confidence to those who follow.

The Colonies and Dependencies.—Another consideration is one which is of far-reaching moment, which is the effect on our colonial fellow-subjects of the way in which the parent countries are profiting by the experiences of the nineteenth century.

The war in South Africa must bring this prominently forward to the minds of these peoples. Once it becomes clearly evident to their legislatures, as it must in time, that the "defensive offence" provided by the parent country is dependent on political questions, and on the existence of a party Cabinet, away must go all confidence in the wisdom and in the efficiency of the arrangements.

Prestige.—If it was not for the prestige of the British Navy and Army the utterances of leading politicians (to say nothing of the independent civil and military faddists) would long ago have destroyed any confidence in the condition of preparedness for war which the Dependencies and the Colonies have imbibed. There is still a conviction that there is backbone somewhere in the United Kingdom. It is maintained largely by the convictions of men, retired from both Services, who are scattered over the Empire, which neutralise the effect on the world of the abjectly weak and inane utterances, to which even the best of our politicians occasionally give utterance in public on military questions.

Danger of Undercutting Prestige.—That generation which has some confidence left must die out, and so far as I can see the rising generation of *thinking* soldiers and sailors who are passing on to the stage of retirement are not so convinced as were those, say, of my time, of the existence of soundness in the foundations of our Imperial armaments. The percentage of such men is on the increase, since the time when one could almost reckon them on one's finger.

Advisers.—The patriotic instincts of any country in the world, whether ruled by monarchical, despotic, democratic, or social institutions, has aimed at the utilisation of the services of sound and experienced advisers. Most of the failures to obtain and use them have been due to the admixture of politics. Still the tribunal to which *these* kingdoms appeal and before which all debatable, vital questions of State *must come* is Parliament. The question is, Are the Parliamentary advisers of the Crown, the best advisers of the Parliament which finds the money?

Peaceful v. Military Administration.—If military (Navy and Army) legislation could be a mere question of policy, through the absence of external influences, there would be no abnormal cause for criticism no more than there is in connection with the civil Government of these realms; but the controlling factor of the existence of external relations

absolutely alters the whole situation. The ordinary process of public debate and of voting, on measures, proposed largely (and unavoidably), subject to party considerations, is fatal, not only to efficiency, but to proper economy of forces and therefore of economy of resources.

Civil Blindness to Military Progress.—The legislator who is also a leader, is inevitably disinclined for party considerations to move with the growth of even surrounding civil conditions, but behind the growth of those military he lags indefinitely. If, on the other hand, he realises and acts as did Mr. Cardwell, he is considered a wonderful military organiser, and in a country like ours, in which the expert counts for so little in the mind of the politician, he, as a clever amateur, is canonised by history, whereas it has probably been only by the accident of his position that he has imbibed convictions from men to whom the whole subject has long been one of common sense.

In all other matters of State, there is not much harm blundering on with our parish system, excellent in its expediency, improving here, and reforming there: but, for the sake of all that we hold dear, let the estates of this realm establish a permanent body, to consult with and to be advised by, on all subjects pertaining to our military safety.¹

Retrospective.—An outcome of the desire to make enquiry at the beginning of the century was the "Commission of Military Enquiry," which sat under the presidency of Major-General H. Oakes from 1806 to 1812. If any steps were taken on their recommendations, there is no record of them. Records of Select Committees of Military Expenditure are found commencing in 1810, 1812, 1817, 1818, 1819, and 1828, most of the recommendations of which had the effect of producing economy, therefore most of the steps recommended were taken. The recommendations of a Select Committee under Lord Ebrington, in 1833, also for the same reason met with the approval of the Treasury. So early as 1837 Lord Howick's Royal Commission, was impressed with the need for consolidation of military responsibility and expenditure, and it was recommended that the Secretary of State for War (the Master-General of the Ordnance being generally a soldier) should be a Cabinet Minister, to take the Royal Pleasure as to the establishment, to be the medium of communication between the Government and the Commander-in-Chief, and to be immediately responsible to Parliament. In fact, the fruits of their report were not reaped till 1856.

Mr. Sidney Herbert's Royal Commission of 1854, on Promotion, is an example of the policy by which an opportunity was given to rising statesmen to become something more than amateurs—in his case a most successful experiment.

1855 and 1856 were distinguished for Lord Monck's Committee on Barracks, Mr. Roebuck's Committee on the Army before Sebastopol,

¹ The late debate on Army Organisation, together with the newspaper articles and notices which it elicited, was a very good example, apart from the merits or demerits of Mr. Brodrick's proposals, of the best conditions under which a Government of these realms can tackle Army reform, and of the literature on the subject with which the nation is supplied. I shall again refer to it.

Sir John McNeil's Committee on Crimean Supplies, and several Select Committees of less importance, but showing the growing interest of the country in the education, sanitation, and equipment, of the Army. That distinguished statesman, Sidney Herbert, in 1858 left his indelible mark on the sanitary condition of the Army and on Army Promotion in time of peace.

Three Hundred Commissions or Committees on the Army.—During the next thirty years—1860 to 1890—the nation may be supposed to have been undergoing a course of instruction in Army matters. In that time, as nearly as possible, 300 Commissions or Committees sat and reported on every conceivable subject connected with His Majesty's land forces only. The wide range covered by these reports, the infinite variety of the matters dealt with, is a monument of industry and includes a vast mass of information which it would require half a lifetime to master. There is not a single subject in connection with the circumstances of an Army in time of peace and its preparation for war that is not dealt with, and as to which, in a large number of cases, there is not material at hand made available, not only to enlighten the general public, but also those whose duty it is to study and take action. As Mr. Mills' Committee of 1861 on Colonial Military Expenditure is instructive for more reasons than one, I shall refer to it in a note further on. The only soldier on it was General Peel, and he absented himself almost entirely from its meetings, and entirely from its divisions, for reasons which are not given.

Committees on War Office Reform.—The War Office has made frequent attempts to get the power to reform itself. I refer to it shortly, more to let my hearers realise that it is a subject which might have to come under the ken of an advisory board, saving the labour and expense of a Commission, supposing Parliament wishes to be again informed concisely as to the merits or demerits of the conduct of business at the Admiralty and War Office.¹

The efforts which the Admiralty and the War Office have made to facilitate internal reform of procedure for the conduct of their business have been numerous; and for this they have not had sufficient credit. In so far as they have failed, it has been largely due to the Treasury drag, while the military departments and not the Treasury are always blamed.²

¹ As a compilation, the report of Mr. Clinton Dawkins' Committee on War Office organisation, which appeared in the *Times* of the 7th inst., is a most useful document; but, in the first place, there is not one single recommendation therein which has not been the subject of former report to the War Office, in some cases many times over; and secondly, recommendations III. and XVII. alone deal with reforms of a kind which might not equally apply to any other of the departments of the Government. Its real value lies in its anticipation of what will be of use when Mr. Brodrick's six small War Offices are established.

² For instance, when Mr. Brodrick's Committee on the Decentralisation of War Office Business," reported in March, 1898, with valuable general recommendations, which were the result of a common-sense review of the mass of detail by which the lower strata of that office (the War Office) are constantly flooded, they had to conclude with the following words, which dealt with the *crux* of the whole question:—"But unless the Treasury will consent to dispense with the control over small matters of expenditure which they now exercise, any large measure of decentralisation of financial responsibility is impossible."

The Treasury.—While at this point let me guard myself against being supposed to try to contradict in any way the valuable and practical evidence of Sir R. Welby and Sir R. Hamilton, in 1887, on the System of Treasury Control of Army and Navy Expenditure, which, in its right place, is absolutely essential. My hearers will, I hope, appreciate that the independent Advisory Board which I advocate may become a useful tribunal, to which the departments can appeal in case of a dispute in which the Treasury control is tending to produce a harmful result.

The principles laid down by Lord Herbert, in 1860, were given a fuller and more complete development by the recommendations of the Committee appointed "to inquire in 1870 into the arrangements in force for the conduct of business in the Army departments" presided over by Lord Northbrook, and of which Mr. Stansfeld was a member.

The perusal of these and the subsequent reports affords splendid reading for the student, but I doubt if their recommendations, and the honorary—and, to a large extent, amateur—labour they represent, ever produced lasting results. If the whole of the arguments, conclusions, and deductions of these and other committees previous to 1887 were edited, and the successive results of the numerous recommendations made by them that were adopted in part or in whole, or neglected, were classified and tabulated, it would give evidence of the fruitless expenditure of an enormous amount of misdirected and wasted energy,¹ perhaps, only not wasted in the instruction it gave to several distinguished public servants in subjects with which they had not been previously acquainted. Although there is to be found running through the reports founded on these enquiries not infrequent reference to an active condition of war, it is intensely interesting to watch how apparently unable these gentlemen (amateurs in war) were to grasp more than academic views of what warfare really means and how all the work of peace must be subordinated to that eventuality.

In 1887, as soon as we got over the discussions and criticisms to which the Egyptian Expeditions had given rise, a much more vigorous tone is to be found in a series of reports commencing with that of—

¹ In the first Report to Mr. Cardwell of Lord Northbrook's Committee, dated March, 1869, we find reference there made to "two ideal" governing financial controls, one based on a system of distrust, of watching, and checking, the other on the union of finance and administration. The one creating "twin rival antagonistic powers" placing efficiency and economy at war: the expenditure which should be directed solely to secure efficiency tending to degenerate into extravagance, and economy which should check waste resulting in incomplete efficiency: the other ideal recognising the function of finance as that of governing the whole policy of administration, and as forming part of the primary responsibility of the Cabinet. It was sought to guarantee to the Secretary of State, advice, criticism, warning, and control. To do this a Parliamentary officer or Financial Secretary united to the Accountant-General with a Permanent Under-Secretary were recommended. Their second report, dated May, 1869, dealt with a Control Department which was essentially a civilian-minded peace arrangement, and swept aside the recommendation of the soldiers, embodied, for instance, in Lord Strathnairn's Committee on Munitions of War, based on experience in the field.

Their third Report of February, 1870, invaded the Horse Guards' administration, and was well worthy of study, but not of adoption.

Sir J. Fitz J. Stephens' Royal Commission on Warlike Stores.—This Commission (of 1887) discussed the functions and responsibility of the Secretary of State for War in no hesitating terms, and describes him as being "charged with five separate great functions." My proposal of an "Advisory Board" would entirely relieve him of some portion at least of what the Commission stated "it is morally and physically impossible that any one man should discharge in a satisfactory manner . . . one man could possess either the time or the strength or the knowledge which would be indispensable for that purpose; but even if such a physical and intellectual prodigy were to be found, he would have to do his duty under disadvantages which would reduce him practically to impotence." The result of investing the S. of S. with these extraordinary powers has been "to weaken the whole system . . . prevents the possibility of establishing a consistent and continuous system, destroys responsibility, prevents the public from knowing for what purpose their money is raised and how it is applied." This Commission also observed that "Parliamentary control rests upon a well-instructed public opinion . . . bearing upon a subject . . . capable of being . . . understood. Where a public question . . . is half understood it is often criticised with unjust severity and unwise indulgence." "The first step to be taken is to establish a definite standard to which military administration ought to be regulated, and at which it ought to aim. . . . The different parts of our military and naval system have a relation to each other," and "it is impossible to differentiate between their needs."

That Commission added that "there ought to be no insuperable difficulty in having the whole of this question determined by a Commission of high authority," and in preparing forms "which . . . would show at the beginning of each successive Parliament how matters actually stood." "Over those returns the Secretary of State need have no control." In spite of this, they shied at the real remedy by stating:—"It would of course be quite beyond the province of the Commission to make any suggestions dealing with defects *reaching down to the very roots of the Constitution*." They give a glimpse of their minds, however, by adding:—"It may, however, be observed that in many branches of the public administration, precautions are taken against defects similar to those just pointed out." For their example they point out:—"The judicial establishment is *wholly independent of the Executive Government* . . . being a service chargeable on the Consolidated Fund."¹

¹ Every line of the report is stamped with the force of a master mind. In its concluding observations the following considerations prevail:—

1. The powers of the Secretary of State for War being so great that no single person can execute them efficiently.
2. The chief of the War Office being practically in the hands of subordinates.
3. The system being directed to no definite object, regulated by no definite rules.

In recommending the revival of the office of Master-General of the Ordnance, with a seven years' certain tenure, they also recommended the formation of a Commission composed of men of the highest eminence and authority to lay down a standard as to the quantities to be maintained of reserves of stores. Apparently, they meant that this Commission should be permanent, as they proposed an annual revision by them. Besides the Commission, they recommended that the Master-General should have a permanent council to advise, to inspect, to adopt, and to investigate complaints.

Can anything be more consistent with that which I advocate?

The Hartington Commission.—As the end of the nineteenth century approached, men's minds began to work up in earnest on the lessons of the past in a manner which was expressed officially in the title of what is known as the Hartington Commission of 1890, appointed to "enquire into the civil and professional administration of the naval and military departments, and the relation of those departments to each other and to the Treasury."

It will perhaps save space if I first point out that the Advisory Board, which I believe to be necessary, does *not* coincide with the only recommendation of the kind—which was more of a suggestion of a fundamental change in the existing system—made by that much-quoted Commission.

The Commission's Proposal.—They just touched on the possible advantage of a "Naval and Military Council," which should probably be presided over by the Prime Minister, and consist of the Parliamentary heads of the two Services, their principal professional advisers, and one or two outside officers of great reputation or experience.¹ The summoning of this Council to be annual, and special only in times of emergency. This is something very different from a standing Advisory Board. Such a Board as I suggest would itself be more competent than the Hartington Commission to deal with and advise Parliament on the subjects which formed the instructions to the latter. There is nothing in the reports of that Commission which could not have been pointed out with much less labour in getting the information together, by a body of men who had spent their lives in the Services. The extraordinary inherent difficulty is what I have before alluded to, namely, that the Parliamentary system engenders the tradition that experts and professional advice are always to be regarded with suspicion.

The need for reforms in "the internal administration of the Admiralty and the War Office," as the evidence of every Commission and Committee since the sixties shows, was equally patent to everyone concerned, and only required, that Parliament should have had a permanent and independent body to look to for advice, probably to have long ago tackled that part of Army reform.

Lord Randolph Churchill's Opinion and Proposals.—As to this we have an opinion of Lord Randolph Churchill in his memorandum of 15th May, 1889, attached to the Reports of the Hartington Commission:—

"Personally, and speaking with some experience and after several years' close study of the House of Commons . . . I have arrived at the conclusion that, eliminating great party issues, the House of Commons with respect to the transaction of ordinary public affairs is an assembly mainly composed of business-like and reasonable individuals, who,

¹ In paragraph 19 of the Report in 1892 of a Special Committee of the Imperial Federation League, this Article (20) on the Report of Lord Hartington's Commission for Defence is quoted. It was suggested that the Council of the Empire, which is the subject of their recommendations, should deal with Imperial Defence somewhat on the lines contemplated by the Commission.

having to find certain funds for certain purposes, desire in the main that the pecuniary demands of Government shall not be obviously excessive, and that fair guarantees should be given for economical expenditure of the funds provided."

This is his statement in view of what he himself, as a member of the Commission, advocated as "a very radical change in our system of naval and military administration." His whole thoughts were concentrated on localising the administration and the responsibility for it on professional chiefs; and he answered the objectors as to "the control of Parliament, the interference of Parliament, the jealousy of Parliament for its rights and privileges," by the above vindication of the common sense of Parliament.

He proposed the abolition of the offices of Secretary of State for War and of the First Lord of the Admiralty, and that they should be replaced by "two Commanders-in-Chief," and that these officers should be members of the Cabinet during their fixed tenure of office for military and naval questions—thus, as he said, keeping "the administration of the Services free from party politics."

"For the purposes of preserving and ensuring financial control, of Parliament, and of the Government"—two somewhat different things, by the way—he proposed to create in addition "the office of Secretary of State and Treasurer for the Sea and Land Forces of the Crown."

He added:—"The three would examine in concert the general requirements of Imperial defence." He claimed, not only that "direct personal responsibility" would be fixed, "but also that the control of Parliament, far from being diminished," would be "considerably increased and made much more effective."

There is no doubt that Lord Randolph had the common-sense businesslike view—unfortunately unattainable—before him. The Commission, under the influence of tradition, better able to judge of what is attainable, sums it up thus:—"While it is possible that Parliament might be disposed to accept in principle a system intended to place such responsibility on professional Ministers, who would not necessarily have seats in Parliament at all, and would certainly not be Members of the House of Commons, we doubt whether this result" (*i.e.*, direct professional responsibility) "could be practically attained."

A question before the nation now is, whether an object that impressed itself on that Royal Commission of 1889-90 has been achieved, namely:—

Are we possessed of a system in which the "two departments" act as one, namely:—

1. For the defence of the United Kingdom, its Colonies, and Dependencies, and the protection of its commerce, supplies of food, and other necessities?
2. For the organisation of the naval and military strength of the Empire, with a view to the conduct of any hostile operations against foreign Powers in which the policy of the country may cause it to be engaged?

The Hartington Commission, having presumably studied the reports of previous Commissions and Committees, and, believing that "a question of principle is involved, which no attempt had been made to solve," supports the statements, "that no combined plan of operations for the defence of the Empire in any given contingency has ever been worked out or decided upon." It is a further question. Were we, and, if so, how far, nearer in 1899 (before the South African rebellion broke out) to the accomplishment of the objects the Commission had fundamentally in view?

In the last ten years the Commissions and Committees have been fewer in proportion, but they are all remarkable for one thing, and that is, that the steps taken in consequence of the reports made by distinguished Chairmen and Presidents and their no less distinguished members have not represented *nearly* 5 per cent. of the recommendations. For instance, of the 77 recommendations of Lord Wantage's Committee of 1892 on "Terms and Conditions of Service in the Army," only one became the subject of an Army Order.

The Cabinet and the Army and Navy.—A very able writer,¹ of quite recent time, in his chapter on "The Cabinet and the Army and Navy," describes a combination for consultation, which is essential to success, *if war is on the horizon*, thus:—"The admiral, the general, and the statesman must not only have compared notes, but have entered fully into one another's minds, before the decision to have recourse to force can safely be made." The trained naval and military judgment co-operating in the inquiry will be subject to "the judgment of a statesman to answer the inquiry whether a projected series of naval and military victories can be used to compel a foreign Government to agree to specific conditions of peace."

He adds:—"The moment the decision has been made, and war has been determined upon, the Cabinet is obliged to rely for the execution of its policy upon generals and admirals."

But all this deals with a possible critical time (which is the exception), when peace and war are hanging in the balance, and not with ordinary times of peace (which is the rule).

If, as Mr. Spenser Wilkinson's views suggest, our First Lord of the Admiralty and Secretary of State for War could be appointments *quam diu si bene se gesserit* they would be transferred from Cabinet to Cabinet, and the immediate military² advisers of the Cabinet would be their chief executive officers, the First Sea Lord and the Commander-in-Chief. Tangible responsibility would then be secured, and "the settlement of the standard of naval and military preparations" could be safely left to these, and the "combination between the two Services, which is the essence of defence," would be secured.

The Army and Navy Estimates, which "lay the foundation of preparation for every eventuality of war," would not then be subject to party

¹ Mr. Spenser Wilkinson.

² The word "military" generally in this paper includes the work of Navy and Army separately or combined.

exigencies, because those Estimates would be prepared and submitted to Parliament by men whose positions are not changed by a party vote on questions with which their responsibilities have nothing to do.

The question is, Would this plan be accepted by those "who fear that by" such an "arrangement the authority or importance of the Cabinet Ministers," whose place depends on party voting, "would be diminished"? There can be little doubt that it would be vigorously and successfully opposed.

The alternative, I repeat, can only be found in an "advisory professional board," to whose advice Parliament can have direct access.

To the mind trained in Parliamentary life the permanence of the board and its having the power of initiating advice might be regarded as a source of weakness, whereas the professional mind will see in it the source of strength, in which the situation has always and will ever, under the present system, be deficient.

Our Meeting of 20th February, 1901.—The expression "Advisory Board" may be objectionable to some who have studied the subject. Such a body as that which I am advocating might be called a "High Military Commission."

On the last occasion that I addressed an audience in this room, I stated that:—"I could quite understand that our legislators . . . view with suspicion the suggestion of being advised . . . it is very difficult for them to realise that they *can* get at the truth without conflicting evidence as to fact. They are so accustomed to expect only part of the truth on any subject from the Government in office, that they do not believe that any board of professional men could be brought together whom they could depend on for advice."

Sir Charles Dilke, M.P.—On that occasion, although I tried to make myself understood, Sir Charles Dilke did not realise, that the future between the Services and Parliament which I described, would not affect the administrative procedure, but that Parliament would be brought into immediate touch with great questions of policy, as regards which it cannot now trust the sources of information to be dependent of mere party considerations. Sir Charles asked, "What does he (Webber) mean?" Can he (Dilke) deny that this factor, namely, the absence of information, affects the way in which Parliament deals with all questions of policy? That he has ever quite realised its crippling effect, I doubt. As Colonel Vetch remarked, "He has not attempted to meet the difficulty on account of which General Webber's Advisory Board was proposed."

That, Sir Charles Dilke has not been able to localise the gap which the experience of the last century, I contend, proves to exist in our military organisation in time of peace, is, I think, shown by one remark on that occasion:—"I do not see how it would be possible for the House of Commons . . . to take so enormous a branch of the national affairs out of the hands of the Government . . . and deal with it without regard to the Admiralty . . . or to the War Office." If the explanations of my proposals were so defective as to give the impression

to Sir Charles that I meant anything of the kind, then I can understand the suspicion expressed by one of the audience that I "did not mean to be taken seriously."

Colonel Vetch "considers such a Board quite impracticable," but at the same time asked, "How are you to get the views of the Commander-in-Chief properly communicated to the House of Commons . . . How is the country to know that the Estimates presented to it do not represent the real requirements of the Services?" *Colonel Vetch* further admits the urgency of my contention by these words:—"For myself, I see no practicable way of doing it as long as we have party Government in England and so long as the Services are dealt with on party lines."¹

Colonel Sandys, M.P.—Again, *Colonel Sandys'* wish to administer the Army like the Navy, by a Board composed chiefly of the profession, does not affect my proposal, which is in no way designed to interfere with the training and working of the naval and military machines, or with the financial or administrative responsibility of the First Lord, and of the Secretary of State for War.²

All the discussion as to the relative positions and responsibilities of the Commander-in-Chief, as of the Sea Lords, and the heads of the great departments, is beside the question. Whether these form advisory or consultative boards to their Parliamentary chiefs is all a question of interior economy, for the purpose of maintaining the highest efficiency and of producing the best results in the departmental machinery.

Colonel Sandys spoke of an annual report by the Commander-in-Chief to be submitted to the Secretary of State for War, who would lay it before Parliament. He took it that this would cover my Advisory Board, which, in spite of my description of the Board's constitution, he suggests would have to be "got together in a hurried way."

His "picked" Commander-in-Chief with "picked" advisers (men holding temporary appointments) would continue to report to the Cabinet through the Secretary of State, who is a civilian, holding an appointment, which is precarious in its duration.

Captain Jessel, M.P., looked below the mark. He pointed to an existing board, composed of the Commander-in-Chief, the Adjutant-General, the Quarter-Master-General, the Director-General of Artillery, and the Inspector-General of Fortifications, and proposed its re-organisation. This is very much what was done by the Order in Council of 1895, to which the late Commander-in-Chief has objected from his seat in Parliament. Nothing that I recommended can be taken to affect the

¹ *Colonel Vetch* also referred to a subject which is of much interest and which was first formulated in the "Report of a Special Committee" (see also previous note) of which *Lord Brassey* was Chairman, of the Imperial Federation League. This report went carefully into the question of the formation of a Council of the Empire to consist of members to be appointed by the United Kingdom and by the self-governing Colonies. India and the Crown Colonies to be represented through the Secretaries of State, to deal with Imperial Defence.

² See No. XIX. of the recommendations of Mr. *Clinton Dawkins'* Committee (which reported in May last) as to a "War Office Board."

advantage or otherwise of such a re-organisation. Nor have I referred to the relations between the First Lord of the Admiralty and the other Lords as to the direction of the Navy. On the contrary, I have expressly stated that my Advisory Board must have "nothing to do with administrative or executive duties."

Sir Henry Howorth thought that I advocated "a Consultative Committee to assist the Commander-in-Chief with its advice."

Nothing of the kind. Whether the Commander-in-Chief is the Sovereign or a field-marshal, my Advisory Board in no way clashes with his functions of command.

In my reply in the debate of the 20th February I made it, I think, perfectly clear that there was no doubt in my mind that under the *best* conditions the Commander-in-Chief of an Army in peace, as well as in war, should, if possible be an autocrat. Do the objectors deny that with us it is impossible, and that "the idea is repulsive to all our institutions and would not be accepted for a moment"?

My distinguished Chairman (*Sir John Colomb, M.P.*), after going astray in quoting me, by suggesting that the Advisory "Council" (he calls it) would simply deprive of responsibility those who must be responsible for the government and expenditure of the country, in his concluding remarks could give no more hope of remedy than that he "did not despair of finding . . . a way of getting out of the want of continuity of policy, and the pursuance of principle in our naval and military arrangements, as time goes on."

Existence of a Gap.—If the discussion on that part of my paper of 20th February, with which we are dealing to-day, has led to the admission of the existence of a gap, which it is vital should be filled up, I have gone a long way towards proving my contentions. I can be fairly asked to give examples proving its existence in the past, and also examples of the way in which it was disadvantageous, and some instances in which the mishaps or miscarriages which actually took place, would have been avoided if such a Board had existed and its counsel had been attended to.

Advisers and Advised.—There are many members of the Service, with long experience in Parliament, whom I ask to bear with me, if I make some suggestions as to how the arrangements I have foreshadowed may be brought into operation.

The existence of an Advisory Board means *advisers and advised*; it also means the presence of a demand for advice on certain subjects. The contention in this paper is, not that excellent advice on the conditions of the offensive defence of the Empire is absent or unavailable, only, that it is neither collected nor collated in the most efficient way, and, that it does not find its way to the matrix where its incubation would produce results most useful to the nation.

As things have existed in the past, there is nothing to ensure as regards the advice, that it emanates from the collective deliberation of the most experienced, proved, and trained intellects, which the two professions, Navy and Army, can produce, under the conditions of continuity and independence which have been already described.

Parliament.—As regards the reception and consideration of advice on matters essential to the stability of the Empire, there is but one body which is competent under our Constitution to take or withhold action which will move the Crown to enact, and that body is Parliament.

It is sometimes said that in Parliament there is no neutral element, and that, in consequence, you cannot there get neutral consideration of advice. It is said that the nominations to any committee—not a Private Bill Committee—is entirely a question between the Whips of the provision of sufficient representation of each party. Now, is this entirely the case? Can there be no independence in the deliberations of a Joint Standing Committee of the two Houses?

It is true that Standing Committees, such, for instance, as the Committee on Public Accounts, are exceptional, and Joint Standing Committees are rare. Since 1864 there have been several Joint Committees which have been very successful in usefulness when one inquiry, common to both Houses, has been required. On such committees the representation has been equal, and they have had power to join in the appointment of a Chairman. Each House is accustomed to have Standing or Sessional Select Committees, which deal with (for instance) privilege, journals, appeals, standing orders, and such-like matters. The Committee on Railway and Canal legislation is practically a Standing Joint Committee.

That Parliament is quite ready to adopt novel procedure is proved by the reports from the Select Committee on the Army Estimates of 1888. The Committee (Lord Randolph Churchill's) was told to "examine into the Army Estimates and to report their observations thereon." There were seventeen members, and they issued five reports. They took evidence on nearly all the twenty-four votes, in the Estimate, and examined between thirty and forty witnesses. Only one member of the Committee, Sir William Crossman, had had any practical professional experience of some of the matters into which they enquired. Mr. Childers and Mr. Edward Stanhope had been War Ministers, and Sir Frederick FitzWygram had been a cavalry officer. A careful study of the proceedings has left me with the following convictions:—

1. That the procedure was a departure as new as it was radical.
2. That it was not repeated because it proved to be far more extensive and elaborate than was expected.
3. That it would have been a much easier task and would have required the taking of much less evidence if the Committee had been assisted by an Advisory Board.
4. That if it had been a Standing Committee with such assistance the repetition of its work in each successive year would have been still easier.
5. That after each year its observations would have been more practical, therefore more useful and much more authoritative.

Secrecy.—If it is the opinion of Parliament that secrecy ought to be maintained, there is precedent for the conduct of proceedings of

committees with closed doors. Parliament can define the numbers of a committee, and nominate or decide, if it will, to appoint by ballot all or any of the members. It might be said that it would be very difficult to secure any real secrecy as to the deliberations of the committee and as to the advice given to it by the Advisory Board. But, in the first place, it should be borne in mind that there is nothing, which is worth knowing as regards an Army, is not known and thoroughly understood in every first-class War Office in Europe; and that, in the second place, the few things like inventions in *matériel* of war, which it is vital should be kept secret for a while, are, in fact, only known to a very few of the officials who make and use them, and that with the technical merits of these inventions an Advisory Board would have nothing to do. Again, although occasionally the deliberations of the committee might leak out in the Press, the weak places where these leaks occur would, in course of time, become automatically closed.¹

Lastly, in time of danger, the risk from traitorous betrayal of information, which it would be of vital importance to keep secret, would be eliminated, because at such a time the Advisory Board's peace functions would have been supplanted by the war executive.

Joint Committees have all the powers—and more, because they can move an address—of Select Committees of each House.

Report from Time to Time.—To such a committee Parliament can grant leave to report from time to time; and it is usual (when it is necessary) for Parliament to refer the reports of such committees, with or without evidence, for the consideration of His Majesty's Government. Addresses upon any subject connected with the Government or welfare of the country emanating from such committees, with the leave of Parliament, may be presented to the Sovereign through His advisers for the time being. Similarly, resolutions emanating from the same source, and under the same conditions, may be communicated through the same channel to the First Estate. For the above reasons it is contended that there actually exists in Parliamentary traditions and procedure, as well as all the precedents required to justify a standing arrangement, such as I have attempted to describe.

A real Defence Committee.—To repeat, the arrangement is the appointment of a Standing Joint Committee on the "offensive defence" of the Empire. What, then, would be their relations with the proposed Advisory Board and with His Majesty's Government respectively? A precedent for the admission of permanent servants of the Crown to the deliberations of a Parliamentary Committee already exists in the persons of the Lord Chief Justice and of the Judges, who may be brought into consultation with committees of the House of Lords.² If such an association in com-

¹ One of the demands of Sir James Stephens' Commission of 1887 was for "system and publicity." With reference to the question of "secrecy," the report added, that "Foreign countries already know all that they care to know about our . . . Army and Navy."

² They stand, or sit on "stools without backs to them," according to "Erskine May's Parliamentary Practice."

mittee is possible in one case, it requires a good deal of explanation to show why it should not be consistent in another. If the Committee were, for example, to consist of five members of each House, and the Advisory Board of five members of the two Services, their total number of fifteen would not be unmanageable. Besides, the Committee would sit by itself and only require the attendance of the Board, either in consultation or to receive proffered advisory reports, and the members of the Board would have no votes.

Insurance of Confidence.—Would the deliberations and consultations with the Advisory Board and the reports of the joint Committee disturb the harmony of the relations between, or affect the confidence of, either the Crown or Parliament, in the Cabinet for the time being? Rather, would not the removal of elements, which often have affected and sometimes destroyed that confidence be an advantage? And is there any question that the confidence of the peoples of this Empire in the manner of considering and enacting on such matters would be largely increased?

Again, is there not a great deal in the effect which a dispassionate consideration of the subject of "offensive defence," in touch with the best experience to be had, devoted to no other duty, would have on the minds of members of both Houses, who had the good fortune to be nominated as members of the proposed Joint Committee?

And lastly, would not the vital nature of the subjects to be considered have a great effect on the manner in which the public would regard the appointments not only to the Advisory Board, but also to the Committee itself, and on the degree of satisfaction and contentment thus properly engendered? And would not there gradually be withdrawn from publicity many matters, the ventilation of which, in the way it is done at present, is a source of danger to the State, not from the point of view of betrayal of information, so much as on account of the misunderstanding on the part of the public to which inaccurate statements give rise?

Suggestions.—When considering the nature of the questions as regards which a Standing Committee of Parliament would require advice from an Advisory Board, those matters which are immediately connected with the administration, order, and regulation, of the Services, would naturally be excluded. The supremacy of the Royal prerogative would be untouched.

The only executive portions of the present Admiralty and War Office administration of which the allegiance should be transferred to the Advisory Board would be the—

Intelligence Departments.—At present the duties laid down for those departments is to collect and collate, but to give no opinion, at least officially. The chiefs of the War Office and of the Admiralty would thereafter be spared all the labour of digesting the information, and the responsibility of deciding on the use to which it should be put.

This would entirely devolve on the Advisory Board, whose standing duty would be to collect, record, collate, and distribute, all the information with which each department and branch of the Services should be supplied. Whenever such information, say, as regards the armament of Continental Armies, pointed to the need for a new departure in matters of policy, the

motive for that departure would spring from the body whose chief duty it would be to dwell continually on questions of professional and technical organic change.¹

The Cabinet.—When the Cabinet required advice as to the suitability of standing armaments to meet a political contingency that might arise, it would not be with the chiefs of the executive of the sea and land forces, but with the Advisory Board (who would regard the conditions with an independent mind) that they would consult.

For example, there can be no possible question that such a Board would have had no hesitation in 1899 to tell the Government the truth about South African warfare, and what they would have said would have been "that an organisation designed to meet a European foe in a civilised country, as was that of our Army, was in most ways unsuitable for an encounter with a swarm of mounted riflemen, in a vast unenclosed area, of which the features, both natural and artificial, have little resemblance to the surface of Europe."

The Estimates.—The question of the consideration of the annual Estimates of each year by a Standing Parliamentary Joint Committee (as in France) is one which I have already mentioned in connection with the Committee of 1888. Evidently the chiefs of the Army would have the best advice of the naval and military heads of the Admiralty and of the War Office Departments and of the admirals and generals commanding large units of command in the preparation of their proposals, and their professional views would have great weight; but, as they would not be on matters of high policy, there need be very little clashing between the Advisory Board and the admirals and generals in active employment. To guard the privileges of the Commons, the "instructions" should state that reports on the Estimates must emanate from the members belonging to the Lower House.

Mr. Brodrick's Scheme.—I may be asked, What is the use of discussing, as a matter of Army reform, the necessity of an Advisory Board, after the ability shown by the present Secretary of State for War in acting on the advice at his disposal and in devising such a scheme as he submitted to Parliament and described to the House of Commons on the 16th May? More particularly as he is reported to have said on the 1st May:—"He was willing to face any degree of unpopularity, but, if he did so, it would be with the Commander-in-Chief at his back, and he would never be afraid to ask the House of Commons for the funds necessary to fulfil the functions which the country had committed to his care."

Without detracting in any way from the genius displayed in the physiology of the skeleton—to use the author's own simile—and

¹ It should be understood that an Intelligence Department in time of peace is a collecting and digesting bureau, and that its work has very little resemblance to the duties of the Intelligence Officer of an army in the field. If war broke out, the Intelligence Office which had been created in time of peace must not be crippled to find officers for the department in the field, or at sea. The system of attaching staff officers for training in time of peace need not be discontinued.

without anticipating any defects in the flesh and blood with which he proposes to cover the skeleton, we have only to remember that in the past, few schemes of Army reform that have been introduced by an able and brilliant and convincing speech have been carried out by the speaker's successor on the lines which were laid down, and that still the call for Army reform, whether rightly or wrongly, goes on.¹

Each Secretary of State's fallibility has been emphasised, no matter how able he may be, by the conditions of his tenure of office; the good things he has done have been too often allowed to die out, if they run counter to later policies or to the views as to retrenchment of the Minister who may succeed him. There is at present no permanent body whose duty it is to comment on, or approve, and support, wise measures, and to watch and safeguard policies which, once adopted as sound, should not be exposed to the probability of being reversed under conditions such as those so fully declared in the utterances of Mr. Brodrick's opponents.

One important duty of an Advisory Board would therefore be to watch the indications of decadence, and falling away of purpose in the working of the Services, and to report and expose it to the Standing Parliamentary Defence Committee, upon whom, then, would devolve the duty of exposing the situation.

Before concluding, may I be allowed to mention a few matters which are waiting consideration?

Strategical and Tactical Problems.—In the paper I read here on the 20th February I ventured to deal with questions connected with the organisation of armies, and their handling, under modern conditions, which require careful attention. These would be the first subject of study for the proposed Board.

Naval Changes.—Not only are great changes in the practice of land warfare looming in the future, but also, if not more so, in warfare at sea is science giving indications that much upon which vast sums of money has been spent will have sooner or later to be "scrapped." With the great engineering ability in the employment of the Admiralty there is no question of interference by any outside body, and fortunately only in very

¹ If the urgency of Army reform, as to which the present Government received the support of the constituencies, had been last year less accentuated by the previous existence of an Advisory Board, which would have been gradually in the past working at reform, Mr. Brodrick's task would have been much easier than it is, and by the permanent existence of such a Board there would be less risk in the future in case he were to disappear, of a departure from the policy which it is clear must be followed for a long time to bring his scheme to perfection.

If that scheme, to which, we are told, the Commander-in-Chief gave his entire adhesion, could have been laid before an Advisory Board, and explained by that Board to a Joint Standing Committee, would it have been any the worse for such a scrutiny? Would not the country have been more satisfied? And would not the debates in Parliament be shorter and more to the purpose, if after the endorsement of the Committee anything was left to debate? And above all things, should we not be spared the ever-present qualification of so many great measures, that should be non-political, namely, that they are "experimental"?

rare cases has the country had evidence of want of judgment or continuity of policy on the lines laid down by those who have to decide. Still there is room for earnest examination as to whether that policy is as carefully thought out, in view of the future of naval warfare, as is indicated by the signs of the times. Herein lies one province of an Advisory Board.

Recruiting.—There is no subject which gives rise to so many conflicting statements and opinions as that of the recruiting of the various branches of our voluntary Service. These are rarely viewed as a whole; there is no body whose duty it is; to keep its hand on the pulse, as it were, of the nation, as to the question of demand and supply; to weigh the policies which affect what might be called the competition for able-bodied men to make them into sailors and soldiers.

For instance, it is very necessary that the nation should be authoritatively informed as to the economical side of the question in regard to the enlistment of lads at eighteen. We resent being presented with a strength of the Regular Army which includes 60,000 lads; but we should not resent it if it was understood that these were *cadets* or recruits under training, outside that strength, and that after they had each cost, during the two years, £84 a year, or a total of £168, they would at 20, when they "come on to the strength," be thoroughly trained efficients. What we require to be assured is, how much more those 60,000 will be worth when they have attained 21 years and completed their 3 years' service, than the man enlisted at 20 years of age (to whom 2s. 6d. a day would have to be given if he is in employment as an able-bodied labourer), who will, at 21, have cost £124 or more than half that amount. Besides, a careful estimation of values would take into account the social advantage to the community of bringing these same lads under discipline at the age of 18.

Generally the Commissions or Committees which sit on recruiting questions, of necessity deal with only one branch of the public service, and the reports for that reason are always uninformative or inconclusive, and generally only lead up to recommendations which have long been matters of common knowledge.

No interference with the actual work of recruiting on the part of the Advisory Body would ensue, but the whole subject would be under permanent observation, and the necessity for new measures of policy being considered by Parliament would be promptly acted upon.

Training and Manœuvring.—In the paper I read here on 20th February last I made some strongly-worded remarks on the fact that those who are trained for war in these islands never have the opportunity of being exercised over the natural and artificial features of the type of surface which forms 90 per cent. of the surface of these Kingdoms.

Is it to be supposed that if there had been an Advisory Board, whose duty it was to urge on the country the neglect of our military administrators to insist on the absolute necessity of such means of training, such negligence would not have been exposed and its effects corrected long ago by the passing of a proper Manœuvres Act, and, what is more, would

not the necessary provision in equipment, clothing, and for the use of enclosed areas by troops under training, and the consequent wear and tear, have had to be faced?¹

Food and Fuel Supply.—Amongst the many subjects which require careful study are the food supply and the protection of the coal supply of the Empire, not only of these Kingdoms but of the Colonies. It is true that these subjects form matter for a large amount of writing in the newspapers and magazines, but it is equally true that there is no nucleus for the official careful consideration of such questions from the point of view of what should be attempted and gradually brought about by legislation initiated by a Standing Joint Defence Committee acting under the permanent influence of an Advisory Board constituted for such a purpose.²

Colonial Defence.—It may be said without undue bias that the surface of the whole question of preparation and mobilisation of what is called colonial defence has only been touched. Occasionally able officers have devoted their attention to the conditions of "offensive defence" in the Pacific Ocean in the event of a great European war, in which we might be involved. Can anyone say that these studies find their way to any place where they are read even with interest, or that any positive advantage, except by chance, is likely to be derived from them?

It is to be hoped that the *fetish*, of comparing the conduct of "military" affairs in time of peace for the eventuality of war, in the words of the instruction to the last Committee, namely, "to report on amendments of procedure. . . . which would bring the work of the War "Office more into harmony with that of large business undertakings,"

¹ It is over thirty years since I lectured to military students showing how columns of all arms should move along more or less straight lines across enclosed countries like that which constitutes by far the greatest portion of the areas of these kingdoms, in order to leave the roads to the heavy wheeled traffic of an Army. I laid out on the ground very many of such lines between the south and east coasts and the metropolis, and compiled and gave the practical details of the engineer work required to clear the necessary gaps in the fences and to fill up ditches and watercourses (about seven to a mile). These problems, though known to every War Office in Europe, are, I fear, still quite overlooked by our military engineers, simply because it is nobody's business to require their study in connection with invasion.

It is not many days since it was reported in the newspapers that a number of mounted officers had been riding over the country round London, and had come to the conclusion that cavalry, as we understand cavalry, could not scout or manoeuvre over it except on the roads. In other words, that, as a screen, or as scouts, or in battle, they would be no use! The marvel is how so self-evident a problem was not observed before. (See my lecture on this on 20th February last, in the April JOURNAL.)

² I do not think that it has been thought of, but a raid on the South Wales coast on a large scale, if we were at war, could be made the means of causing serious and protracted injury to our best sources of coal supply for the Navy. Nor do I believe that the necessary precautions have been made a matter of study, or how far a Volunteer movement among the coal miners, if for the object of defending the mines, would succeed. (See, Captain S. L. Murray, "Our Food Supply, etc.," p. 656 of the JOURNAL, June, 1901.)

would, under the influence of an Advisory Board, become better understood and exposed.

Before finishing, permit me to digress a little.

Mr. Mills' Committee of 1861 on Colonial Expenditure.—The inquiry itself turned chiefly on the fact, *then existing*, namely, that in some of the oldest, most numerous, most prosperous, and most energetic of our Colonies "not one farthing was expended or one man raised and trained for the defence of their own lives and properties against foreign enemies," and notwithstanding the fact that the Colonies of all other nations, ancient and modern (and English Colonies till we quarrelled with America) have either defended themselves or paid their full share of the expenses of the common defence." (Godley.)

The turn which the inquiry and the report took is curiously confirmatory of the inability of the statesman's mind to unravel unaided the effect of apparently conflicting expert evidence in connection with "military" questions, and to collaborate or put it together or come to scientific conclusions on the great questions of the offensive defence of the Empire.¹ It is not to be wondered at—in spite of the great names in the lists of those who inquired and of those who gave evidence—that the reductions and economies which clearly were the motive for the inquiry, were the only matters which interested those called on to report. Lord Herbert of Lea gave the key to this when he stated that he would alter the policy of the past, and "should accumulate all the forces that it is possible to accumulate at home, and keep as few men as possible in the Colonies."

Here we had the House of Commons the recipients of a report, the influence of which helped to guide the policy of the last half of the nineteenth century, a report which was sound, no doubt, from the purely financial point of view, but which, at the same time, obscured every issue except that of non-militarism. A Standing Joint Committee would

¹ The questions put to Rear-Admiral Erskine, for instance, were to get him to show that a sea defence of the Colonies was less costly than one on land, and thus the value of that part of his evidence which was based on the greater mobility of the sea unit as compared with the land unit was thrown away. When we come to the examination of Sir John Burgoyne, we find that all his evidence is subject to the condition that England "might probably lose the command—say, of the Indian Ocean—for weeks and months together." In other words, that command of all the seas, or only of some of the seas, are alternatives which present different problems. The Committee was of opinion "that the multiplication of fortified places, and the erection of fortifications in distant Colonial possessions . . . involved useless expenditure . . . and failed to provide an efficient protection for places the defence of which mainly depends on superiority at sea." Also, in adopting the view "that the tendency of modern warfare is to strike blows at the heart of a hostile Power," they drew the conclusion that "it is desirable to concentrate the troops required for the defence of the United Kingdom," and to trust the defence of "distant Dependencies" to naval supremacy. In viewing the situation from only one standpoint, namely, that of finance, they seem to have been unable to imagine a state of war, when the Colonies as part of the Empire, might be supposed to feel that the fortification of Melbourne or Quebec might be of equal importance to the inhabitants of those places as, say, that of London may be to the 6,000,000 who form its population.

approach this subject, doubtless, under a similar instruction from Parliament, namely, to reduce the financial burthens on the United Kingdom, but, if it was assisted by an Advisory Board, it would deal with the "offensive defence" of the Empire as a whole and the report would cover the whole ground.

If there is one thing which the country feels it wants, it is some tribunal of ultimate appeal as to "who is to blame?" "who has blundered?" If it is possible, could there be a fairer or more competent one than the Committee, assisted by assessors taken from the Advisory Board?

The question I have had the honour to bring before my audience is one that I am hopeful they will not dismiss without weighing it carefully. I do not think that any practical attempt has ever been made to attack at their foundation the evils which clearly exist. The nation and peoples of this Empire can easily understand the reasons for my proposals from one point of view, because they can realise that at present there is no tribunal for placing the responsibility for failure on the right shoulders. The Legislature and the officials are fully aware of all that I have laid before you, and are fully competent to weigh my proposals in the balance; but in this case, if they cannot reconcile them with existing arrangements, or, if they cannot modify those arrangements to dovetail into my proposal, then it is certain an increased and ever-increasing responsibility of the gravest kind will rest on them in the future.

Colonel R. H. VETCH, C.B. (late R.E.):—I am sure we are all very much indebted to the lecturer for again bringing this important subject before us, and so giving us an opportunity of once more considering whether it be possible to find any remedy for the existing state of affairs. On the previous occasion, I do not think the difficulty, which General Webber proposed to meet by an Advisory Board, was altogether understood or appreciated. But having now elaborated his views, and given us more detail, we are in a better position perhaps to discuss the proposal. Before, however, I make any observations on the subject of the lecture, I hope General Webber will pardon me if I venture to make a verbal criticism and enter a strong protest against the expression he uses—*offensive defence*. I have noticed its use lately in reviews and magazine articles, and am at a loss to conceive the object of such ugly tautology. It seems to me, if you will forgive a pun, that it is an *offensive* expression. The word *defence* is a good word with a broad meaning which everyone understands, and includes all that is necessary. It means hard-hitting as well as warding off blows. The *defence* of the Empire is a very well understood term, and provides for the safeguarding of the Empire in every possible way, whether by hitting out, or by warding off blows. So when we talk of "the noble art of self-defence" we do not preclude the giving of knock-down blows as well as the warding them off. No one, I am sure, would venture to speak of the noble art of offensive self-defence. The military use of the word *offence* is a very narrow one, connoting the blow, as opposed to the guard, the forward movement as opposed to the stand, the active as opposed to the passive. Therefore, I think, we may be very well content with the word *defence*.¹ To go now to the subject of the lecture, may I dwell for a moment upon the real difficulty that exists? The lecturer calls it a gap, I should rather call it a fundamental weakness. It is that there is at present no way of placing before the country the real and true

¹ To balance this hostile criticism, I congratulate General Webber on his use of the word *military* in its old wide sense of pertaining to war, whether by land or sea.—R. H. V.

requirements for its protection, and of keeping them in view of everyone. This difficulty is a very serious one. Take, for instance, the very broad-minded measures which were introduced by Mr. Cardwell, the War Minister of the early sixties, who was advised by a committee—one of the 300 of which the lecturer has told us—one of the most important Committees that has ever sat at the War Office, I mean the Localisation Committee. It was presided over by a very able administrator and organiser, Sir Patrick Macdougall, whose name was well known in those days in this Institution, and upon it also sat Lord Wolseley, then a colonel fresh from the Red River Expedition. That Committee proposed the system of linked battalions—two battalions were to be linked together with a common depôt, one of the battalions to be always at home and the other abroad—a very statesmanlike system, which was approved and adopted, but in a few years got quite out of joint. Why? The necessities of the Service required more battalions abroad, no money was forthcoming to raise new battalions, consequently the system was completely dislocated and the linked battalions were often abroad together. It was not until quite recently that sufficient battalions have been added to the Army to enable the system to be worked. Is not that an instance of a case in which great care was taken at the time to institute a beneficial reform which was welcomed by the Service, but, owing to our system of Parliamentary Government, it was allowed to fall into disuse? the consequence, of course, being that we lost all the benefit of the system: To take another instance—I remember some years ago meeting the Secretary of State for War, when I congratulated him on having got a vote very easily through the House of Commons which he did not expect to get through without opposition. The amount asked for was only half what was actually required, and I ventured to observe that it was a pity he had not asked for all that was wanted. His answer was “Ah! but then I might not have got it.” That shows in another way how we are tied up by our system of party government. He knew that he wanted twice as much, but he did not ask for it, because he did not trust the House of Commons to give him so large a sum. The point, however, to be remembered is that the Army is governed by a civilian who is directly responsible to his colleagues, to the House of Commons, and to the country at large, and you cannot relieve him of that responsibility. I think Sir Charles Dilke on the last occasion very ably pointed out that it was quite impossible for any Advisory Board to be instituted, because it would interfere with that responsibility. Suppose, for instance, that the Commander-in-Chief were allowed to present an annual report to Parliament. If he were in this report to differ from, or to give away, the Secretary of State in any way, he would not only interfere with the responsibility of the latter, but he would upset and spoil the political game. After all, politics is a game, and you must play the game according to the rules; and if the Commander-in-Chief went behind the Secretary of State for War in any way, or showed up anything that the Secretary of State wished to conceal, the political game could not be played. The lecturer proposes to get over the difficulty, which is no doubt a very serious one—that we cannot get the country to know exactly the state of affairs, because it must go through a system of party government—by the institution of an Advisory Board, composed of five persons, three of whom, I presume, would represent the Navy, and two the Army. The duties of this Board are briefly, as I understand the lecturer, to prepare for war, to undertake the Intelligence business of both the Admiralty and the War Department to supply the executive with all information, and to advise Parliament. As these duties will take up a great deal of time, the members of the Board are to devote themselves solely to them, and to have no other official business. At present, the chief technical advisers of the Government are so occupied with routine duties that they have not time to go into the higher questions of preparation for possible wars, and that is, I presume, one of the reasons why the lecturer proposes to adopt an Advisory Board. But, is it not rather a difficult matter to constitute an Advisory Board independent entirely of the Secretary of State for War, and of the First Lord of the Admiralty, independent also of the Commander-in-Chief, and of the Naval First Lord, who shall have under their control the Intelligence Departments of both Services and

shall communicate direct with a standing Joint Committee of both Houses of Parliament? Is not that raising up a body which must result in friction with the authorities that be? Is it not creating a fifth wheel to the coach? Supposing there is a difference of opinion between this Advisory Board and the Secretary of State for War and his advisers; supposing that the Advisory Board, in communication with this Joint Standing Committee of both Houses, give advice which is different from the advice given by the official advisers of the First Lord of the Admiralty and of the Secretary of State for War: The Standing Joint Committee, intimately associated as it necessarily must be with its Advisory Board, will be inclined to agree with that Board in opposition to the responsible Parliamentary heads of the Navy and Army. What then becomes of the responsibility of the First Lord of the Admiralty, and of the Secretary of State for War? It seems to me that the result must be utter confusion. The lecturer has alluded to the French system. I have not sufficient acquaintance with the French system to make any profitable observations, but I must say that on the face of it there appear to be merits in it which might lead us out of the *impasse* which exists. He also referred to the inter-communication of the Admiralty and the War Department. Having had some experience of that in the Joint Naval and Military Committee of which I was Secretary for some years, I know the great advantage that accrues from bringing together the high officers of both Departments, in one body, to discuss matters of harbour and coast defence and so forth, and that it enables many things to be disposed of which might otherwise become the subject of lengthy correspondence. But these principal officers of the two Departments have their hands full of routine work, which prevents them personally attending to those matters of high consideration that the lecturer proposes should be assigned to his Advisory Board. If this Advisory Board could be dissociated from Parliament—association, however, is the essence of the lecturer's proposal—and made an advisory committee to the Secretary of State, I think it would be most desirable. You would then have two or three officers who would have their hands free, would not be occupied by any other duties, and would be able to give their whole attention and time to the consideration of preparations for war at any and every point. I think it would be a very desirable thing to have such a Board; but this is not the proposal of the lecturer, and I confess I do not see how his proposal enables the requirements of the Service to be raised out of the sphere of party government. On the last occasion, I referred to an Imperial Council of Defence. I looked forward to a time when we might be able to get over the difficulty by putting the Army and the Navy entirely outside the domain of politics. If we could only get that done, of course the lecturer's object would be achieved. At a future time, when the great self-governing Colonies have reached the point at which they can contribute to the general exchequer for war services, it may be possible then to have an outside body, an Imperial Council of Defence. By the by, that suggestion I see is attributed by the lecturer to the Imperial Federation League, but I think it began much earlier than that. I believe Sir Frederick Young, when he was Secretary of the Royal Colonial Institute, thought of it and published papers on the subjects. If we could only get such a body of Home and Colonial statesmen to consider all the great questions of Imperial Defence authoritatively with the help of experts, both official and non-official, so that it would be in a position to say: "The Empire requires such and such defence, and the cost will be so much"; and if such a council were empowered to allocate the cost to the mother country and the great Colonies in some recognised and approved proportion—of course the Colonies would be able to bear very little at first—it might then be possible, temporarily, to remove the defence of the Empire out of the sphere of politics, until such time as the defence requirements of the Empire were known to the people of the Empire. Politics must of course come in eventually because each Government would have to present its quota of the bill of costs to its own Parliament and fight it out there. The main point, however, that we are all anxious for would be secured, and the public would know what the requirements for the defence of the Empire really were, and, knowing the state of the case, it would be their own fault if the necessary measures were not passed in their respective Parliaments to enable those requirements to be met.

Colonel T. MYLES SANDYS, M.P. (late 3rd Battalion Loyal North Lancashire Regiment) :—The remarks that I venture to offer to-day upon the able paper under consideration are only justified by the fact that I am a Member of Parliament who takes some interest in the subject, and that I have had the good fortune to have some years' service and experience in various parts of the world. The point which I think we shall all agree upon is included in the paragraph quoted by the lecturer from the words of another authority :—"When I reflect upon the issues involved, I am lost in amazement at the indifference of the public. To what is this indifference to be attributed? It cannot be to want of information, for this subject (Imperial Defence) has been placed before them over and over again, here and elsewhere, under every aspect; it cannot be to any inherent difficulty in the subject, for it is devoid of professional technicality, and so simple that a child may comprehend it." Well, Sir, I do not think it is so simple that a child could comprehend it, for the lecturer in the admirable paper he has read to us has dealt with the whole question in a manner which I confess has, in the short time before one for consideration of the paper, completely taken one's breath away. I do not mean to say there are not a great many valuable suggestions in it, but they are questions of such far-reaching extent, and involving consequences so great should they not be based upon the correct principles attained by the experience of nations in war, that we may well pause before we express an opinion upon questions involving such important matters. The first, and perhaps most important point in the whole thing, is the question of how and where we are to begin Army reform, and it is to that point especially I would venture to address a few words, without going into details as to armament, or obliterating the lines which are the recognised lines of demarcation between different arms of the Service. But with reference to Army reform, it does seem to me that what we have to do is to concentrate our minds upon the bedrock of the military machine, because unless the machinery which turns out our military working subordinate machine is itself correct in its working, we cannot expect that its effects will be good. It does seem to me—and I have given some little thought to the matter, as the lecturer perhaps may be aware—that where our military administration fails is that the civilian element is allowed at the War Office to intrude too far into the military working of our Army. What we want is that our Army should be thoroughly and entirely administered by the best military experts that can be furnished from the ranks of our Army, and it has seemed to me that the man in whose hands the whole reins governing the details of the entire Department should be placed is the Commander-in-Chief. He seems to be the man who should control the whole machine. It may be said that it is essentially a part of our Constitution that our military administration shall be subordinate to the civilian administration. I say well and good; that is a constitutional principle that we are all most ready to accept, that is to say, that the Secretary of State for War is responsible to Parliament for the efficiency of the Army. But because he is supreme to the military administrator (who, as I say, should be the Commander-in-Chief) it does not follow that there should be subordinate civilian officials in the War Office to hamper the working of the military men who control these Departments. I will point out exactly what I mean. There is an official in the War Office who is called the Permanent Under-Secretary. He is a civilian; he has had no military training whatsoever; but the Secretary of State for War, however able and conscientious a Minister he may be, is subject to the changes of administration, while the Permanent Under-Secretary remains for ever, and his influence over the War Office is like the dead hand that can control the activity of any too zealous administrator within the range of the War Office. Then, again, we have a Financial Secretary to the War Office, another civilian who has been trained for the most part in the Treasury. The endeavour of the Treasury is to grasp the control more or less of every one of our public Departments. What need have we in the Army for a Financial Secretary? The first thing I would suggest for improving our Army organisation is to get rid of the Financial Secretary altogether. What should be done is that the money which Parliament votes for the Army should be handed to the military authorities, and they should keep a proper

record of how the money is expended, and that record should be considered sufficient. We do not require a Financial Secretary, because there is an Accountant-General, with an experienced staff under him, to attend to that matter. That, however, is a mere detail. But the question is, how the Commander-in-Chief should be advised and supported. We cannot take a better example than the sister Service. The Board of Admiralty is composed almost entirely of sailors, all the best men in the naval profession, and the First Lord has the advice of these naval men; and the administration of our Navy, I think we shall all agree, leaves very little to be desired. Let us bring the same principle into the administration of our Army. Let the Commander-in-Chief be, so to speak, a military copy of the First Sea Lord at the Admiralty, and let him have a Board of advisers under him, probably composed of the Adjutant-General, the Quarter-Master-General, the Military Secretary, and the officer at the head of the supply, in all perhaps some seven or eight officers, heads of Departments of the Army. There the Commander-in-Chief has his Military Board. That Board can advise him on the working of each of their Departments, and each year it should be part of the duty of the Commander-in-Chief, who in a military sense should be responsible to Parliament and to the nation for the efficiency of the Army, to embody in a document his views upon the requirements of the Army, in order to bring it to a state of efficiency, and that document he should submit to the Secretary of State for War, and the Secretary of State for War should himself, with his own remarks, lay the matter before Parliament or before some body deputed by them on their behalf, to consider or recommend—which recommendation should be adopted—all the measures put forward for the efficiency of the Army. This, I take it, would cover the ground which the lecturer has put before us for an Advisory Board, the only difference between us being that instead of this Advisory Board of eminent persons who perhaps—I may be pardoned for using such an expression—would have to be got together in a hurried way, we should have the firm experience of officers of great knowledge, in whom the country would have confidence, headed by the Commander-in-Chief, the picked man of the whole of the British Army. His reports are passed through the Secretary of State for War to the Cabinet and to Parliament, embodying the whole military experience of the best men we can find. That, I take it, is the way in which the administration of the Army and the first reform of our present unsatisfactory state of things should be set in motion. With regard to details as to armament and so forth, defence, and how to organise the civil population, the limits of time at my disposal will not permit me to enter upon them on this occasion. But I did think for once I might have the honour of laying before this meeting of experts my views of the matter which has occupied my attention for some time.

T. MILLER MAGUIRE, Esq., LL.D. (late Inns of Court V.R. Corps):—As I told General Webber before, I did not like to say much in regard to such a tremendous subject as he has taken in hand. I waited patiently to see whether any other gentleman or any expert was ready to rise before I trespassed on the attention of the audience. It has been asked why it is that when we have had three hundred reports made, nothing has come of them. The reports, according to the learned and gallant lecturer, would occupy a lifetime. Whose lifetime?—the lifetime of a David or the lifetime of a Methuselah? I would not undertake to read the three hundred reports in the remainder of my short life. With regard to why it is that these reports have not been collated and edited and brought before the public I can only answer from the point of view of the constitutional law, and not from the point of view of a military expert. I think the reason is the tendency of the art of war as well as of the art of government to decay when the principal duty of rulers and leaders of mankind is not to lead but to follow, not to teach the man in the street but to wait till the man in the street makes up his mind before they make up theirs. I am not giving that on my own authority. The answer to why a nation like this of 40,000,000 people absolutely goes staggering along, a model of ineptitude, and drifts so that when it comes to be faced by a few thousands of peasants who could have had no military nor constitutional policy, nor could have been properly armed a decade

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ago, is given by Captain Mahan. Some of my audience know Captain Mahan's books well. In a book entitled "The Influence of Sea-Power on America" he tried to teach his own people the necessity for being ready, and tried to teach them the lessons which had been taught to the Greeks and the Romans and the English in the days of Elizabeth. He says, I think on page 241, that so thoroughly saddened are both parties in England with the notion that ability of government is ability to gain votes, that they are absolutely unfit to conduct the destinies of the British nation in a crisis. I agree with him entirely. He says that neither of the parties is likely to be of the least good to the nation. He declares that Tories and Whigs are equally behind the times, imbued with the ideas of the Manchester School. I do not know what party the gallant lecturer belongs to. I have been working for eighteen years as much as I could for the Unionist Party. Whichever the party is, Captain Mahan thinks this party system is wrong as applied to foreign policy and war, and an anachronism, and declares that with our present leaders there is little hope for us. "When men in sympathy with the ideas now arising among Englishmen come on the stage we shall see a change for the better—not before." I was surprised to find that General Webber was under this kind of fetish of Parliamentary Government, and his admiration for Cabinets and all that kind of thing. He talks about the Constitution. What is the Constitution? When was the Constitution formed? What is the object of the Constitution? Why should we reverence the Constitution? Our ancestors upset it as often as they pleased. Is the War Office a part of our Constitution; if so, for how long? Is the obstructive Treasury, of which the Prime Minister so bitterly complained; if so, for how long? Was the Constitution made for us, or were we made for the Constitution? Yankees have also a Constitution, apparently rigid, but they make short work of its rules when they think fit; it did not in the slightest degree prevent them the other day from making subjects of the people of Cuba and the Philippines. Your admiration for a destructive Constitution must give place to the necessity for preserving the State. It is not the pillar of the State. The pillars of the State are the Navy and the Army. If the Constitution as it exists, if our Cabinets, Party Government, and Parliaments are utterly effete and worthless, if they will not work well for the State, then it becomes the duty of the gallant General and the rest of us to see whether or not we cannot alter the Constitution as quickly as possible. We have had before us recently two more schemes. Will they do the least good? I should like to ask Sir John Colomb his opinion as to how these two new plans—Mr. Brodrick's and that of Mr. Clinton Dawkins—will work. We have this wonderful skeleton plan of reformation—I think General Webber calls it, of Mr. Brodrick, this new scheme of Army reform. Is there a man in Europe, or in America, or any Briton, who is not a party man first and a patriot afterwards, who believes that it will be of the least use, that it is more than a mere matter of shreds and patches, a mere tessellated pavement of badly fitting imitation of mosaic without cement? You will find that this magnificent scheme of reform will be reformed itself before three years are over, and that new scheme of reform will also be reformed unless statesmen began first to consider how they are to lead instead of how they are to follow the people in regard to questions of vital importance for the stability of our Empire. Then we have this other matter, the revolution of the War Office. I hope it will do some good. I am sure Sir John Colomb will do us an enormous amount of good, the influence of which will be felt for many a day, if he could assure us that the Government has any intention of adopting the plan suggested by Mr. Clinton Dawkins. If it is not framed by experts, I do not know what an expert is. But I am not a worshipper of so-called experts. I have met a great number of general officers and colonels who know a great deal less about the campaigns of modern times than civilians know. I know that on the Continent of Europe some of the greatest military reforms have been accomplished by civilians. Bonaparte was not a veteran expert in 1796-7, yet he made short work of his opponents. If we wait till the professional experts of our Government offices initiate reform we shall never get any reform. I think everybody who has anything to say from the point of view of history, or even theory, should be carefully heard, whether he is an "expert," so-called, or not. The only thing

that will move our Government to put our military house in order, and to give up an existence of muddling and blundering, is the pressure of public opinion; and the sooner a powerful agitation is started in favour of military and naval efficiency combined, the better for all classes of our people, otherwise neither the Cabinet nor the Parliament will help us in the least.

Admiral Sir EDMUND FREMANTLE, G.C.B., C.M.G. :—I regret that I was not able to hear the lecture delivered, but having had the advantage of reading it, I think I am capable at all events of speaking to the lecture, if not to the discussion. If I had not been specially asked to come here I should not have done so, because I was otherwise engaged, and also because, although it is a subject of the greatest interest, I doubt whether it is exactly in my province, and I am quite sure there are many here who are capable of discussing it better than myself. The main proposal of the lecturer, as I understand it, is that there should be an Advisory Board. Undoubtedly he is right in thinking that some advice is required in the public Departments. I repeat that that is one of the things from which we especially suffer. I can speak perhaps more particularly of the Admiralty, because I know very well that we have done some things in hot haste, and have been led to do them for a longer period of time than seemed to me necessary, and the result of the hot haste has not always been satisfactory. We have it from Sir John Hopkins that it is impossible for the Admiralty to do much more than attend to their routine duties, and I have very little doubt it is much the same in the War Department. They cannot do much more than attend to the numerous things which must daily come before them. This routine work and daily work, very often of the greatest importance, might be reduced by decentralisation; at the same time the daily work of a great Department, whether it is the War Department or the Admiralty, must be very large, not to say excessive, for the members who have to do it. Under these circumstances it is impossible that the Lords of the Admiralty, or the heads of the War Office, can have sufficient time to enquire into those details of construction, invention, and improvement which are the product of the age, and consequently we are often behind-hand. I should like to fortify myself by an opinion which I heard the other day from an officer. This officer said he had made the acquaintance of the French Admiral Courbet, who was a very distinguished and far-seeing French naval officer. Admiral Courbet made this remark :—"It strikes me that it is very curious that your Admiralty makes so little use of the information which they have at their disposal in the officers who are no longer on full pay and no longer employed in direct service afloat; their opinions are never asked." It has always struck me as very curious, and I must say I entirely agree with him. There are officers that one could name—I do not speak of myself, because I am shortly going on the shelf, and I am quite prepared to make room for younger men—in our Service, and I have very little doubt also in the sister Service, who are thoroughly competent in every respect, whether they have retired or are on half-pay, whose opinions must be valuable. At the time when they could give all their energies, knowledge, and experience to the Services they are relegated to the shelf, and if they give their experience at all it is at the United Service Institution, which I have heard irreverently described as a "talking shop." I agree with Admiral Courbet, and I agree with the lecturer in what he states in his lecture, that the Services possess men who have all the necessary experience and all the necessary knowledge to form this Advisory Board. I have spoken generally of the necessity for an Advisory Board. I wish to cap that to some extent by showing how useful and how absolutely necessary the Ordnance Select Committee has been. We know that that is a permanent Committee; we know that it investigates carefully into all improvements, all inventions, all the changes in ordnance and explosives, and then makes its report. Those reports may not always be absolutely reliable, but at least we have a guarantee that they have been carefully threshed out, and that every endeavour has been made not to pass a thing that was unsatisfactory, and if mistakes are made—for human nature always will make mistakes—they are not made because the report has been drawn up in a hurry, or because it has not been sufficiently

considered. We know very well that the Ordnance Select Committee reports to the Secretary of State, and that of course makes it a very different committee from the proposal which has been made by the lecturer. The proposal made by the lecturer, as I understand him, is that they should act practically independently. I do not see exactly how that can be. It appears to me to be a decided difficulty, but I can quite see that it is possible to have a Committee of both Houses, as was proposed by the lecturer, and that this Advisory Board should be in direct communication with them, and I cannot see that that would be in any way contrary to our constitutional practice. At the same time, it does seem to me that the Advisory Board must be appointed by somebody. You can scarcely ask for a general election as to who should be on the Advisory Board. The members of the Advisory Board must undoubtedly be appointed by the Crown. It also seems to me that we might carry this Advisory Board a little further. Supposing, for instance, it consisted of eight members, four belonging to each Service; and supposing it took over, as has been proposed by the lecturer, the Intelligence Department, undoubtedly they would have to go to the War Department and to the Admiralty for all the information and reports which they have, and they must be in close touch with them. They would form sub-committees, and I should propose that they made their reports to the Secretary of State, and to the First Lord of the Admiralty, from time to time as well as being called before this Committee of both Houses, to which the lecturer has alluded. I should hope that the Secretary of State and the First Lord of the Admiralty would use them as sub-committees. For instance, two naval officers might make inquiries into certain ships which had to be built, two military officers might make certain enquiries with reference to tactics on the military side. When a burning or difficult subject was brought forward which required to be threshed out and which the ordinary department was not prepared to give the time to thresh out, instead of as at present is too often the case, passing it over to the civilians in every department, who really do not understand the subject—for that is what is done in the Admiralty, and even more in the War Department—these subjects would be threshed out by two or three, I presume, thoroughly competent men, who would be appointed for a term of years and so far be practically independent. They would be able to assist without getting rid of the Intelligence Department of either Service; the Intelligence Department would be a comparatively small one, and it would hand over to them certain subjects for consideration which they would consider just in the same way that the Ordnance Committee considers matters now. I can only say, in conclusion, that if anything I have said, or that the lecturer has said, leads to the subject being more fully discussed—and, perhaps, after all he may have more reason in his proposals than I have in mine—whatever the result, if there is any, of this discussion may be, I cannot help thinking that in these days we are rather more alive to the benefits of the discussions we have at this Institution than we were some time ago, and I very much doubt whether the Institution could now be called by that opprobrious term to which I have just referred. If any suggestion which has been thrown out to-day should result in a better preparation for war, more continuity in our military administration and generally in our better preparedness, I think General Webber will have done a great service in bringing this subject before the Institution.

Colonel Sir E. T. H. HUTTON, K.C.M.G., C.B., A.D.C., *p.s.c.*:—I regret I am hardly in a position to discuss the extremely important points which General Webber has brought before the meeting to-day. They are matters which involve the policy of the country, questions of importance upon which an officer like myself on the active list finds it very embarrassing to discuss or criticise—I do not therefore propose to deal with the question of Army reform. There is, however, one point with reference to a remark of General Webber as regards the defence of our overseas Colonies. I think, perhaps, he has overlooked the fact that all the reports connected with the defence of our overseas Colonies, whether Australia or Canada (with both of which I have been associated), are most elaborately and carefully prepared, and are sent to the Colonial Defence Committee, where they are carefully collated, thought out, and discussed. I was extremely pleased and gratified to hear my friend Dr. Miller Maguire speak. It is many years

since he kindly backed me up in our efforts to get the question of mounted infantry accepted by the Army: and I was extremely pleased to hear him enunciate the view that the real way to get any reform accepted in this country is by the education of public opinion. I am perfectly certain of this, that it must be the people, the great electorates, the constituencies of this country, who must demand reform, and if these reforms are to take a practical shape it must be by the people being educated by those who are experts on the different points in connection with which reforms are required. My experience has been very considerable in our self-governing Colonies, where the constituencies are composed of extremely hard-headed and deep-thinking men, and who, if great public questions are put to them in a straightforward, practical, and sound manner, invariably decide to deal with them in the same spirit, and to insure that their representatives in Parliament do the same.

MR. LEEDHAM WHITE:—Last week I was sitting with two friends, both Prussian officers, in a German town. The conversation turned on the war. The officers spoke in a friendly and even laudatory manner of the British Army, but they both agreed that it could not be brought up to the highest standard of efficiency until it had been withdrawn from civilian control and management. Of course we know that it is impossible to do this under our system of Parliamentary government; and this being so, it would seem to some of us that General Webber's plan of a strong Advisory Board of military and naval men, working with a Joint Committee of both Houses of Parliament, may be a good one, as a long step in the right direction, and one which does not clash with our political institutions. The remark has been made before in this room that what is really wanted to impress the British public is a weighty expression of opinion from trusted naval and military experts as to what reforms are required in order to give us an Army and Navy adequate to the defence of the Empire; and it is thought that a permanent Advisory Board of the sort suggested by General Webber would secure a respectful hearing from the public and from Parliament of its reports and recommendations, which would not be influenced by party bias or by the wish to catch votes. If Parliament disregarded its recommendations, it would do so at its peril, and the nation would know on whom to fix the blame should disaster ensue. At present we do not manage our military affairs on business principles. It is a business principle that only experts who understand a trade can successfully conduct it. Supposing Government were to take over some vast manufacturing concern and the managers gave important advice which was disregarded from political considerations or from unwise economy? What would these managers do if they had proper self-respect? They would say that unless they were allowed to conduct the business from the sole point of view of making a suitable article in the best way they must resign their posts. Why not apply these principles to the management of our military affairs? As things stand at present, military opinion is liable to be overridden by political exigencies, and as far as I am aware we have hitherto never had an instance of a Commander-in-Chief throwing up his position because he could not impress his views on the Government of the day. An Advisory Board would have no executive authority nor responsibility, and need not resign, were its advice not followed. But at least the British public would know what advice had been given, and if it thought that vital national interests had been neglected, it could make its indignation felt in a very effective manner.

Major-General WEBBER, in reply, said:—I have to thank Colonel Sandys and Sir Edmund Fremantle for the way in which they have spoken of my proposal, because they are two authorities who may look upon it from opposite points of view, and who have had opportunities both in Parliamentary and official life of weighing the possibilities of my suggestion. The very strong measures which Dr. Maguire proposes I have avoided, because if the course of my paper has been followed it will be seen that I have as carefully tried to show how the existing conditions do not clash with this proposal. Of course, any criticism of what has happened in the past and what has led up to the condition of things under Parliamentary Government which now exists, has to be read with care and with a certain amount of reference to the

authorities I have quoted, because in a paper which occupies only one hour you will very well understand it is difficult to crowd in all the quotations that one would wish to give of what has happened in the past in sufficient clearness to be convincing. In some of the notes I have brought forward the points more in detail, and, therefore, I would ask that when the paper appears in the *JOURNAL* of the Institution, those members who take an interest in the matter will read it again. Mr. Leedham White's reference to "business principles" reminds us of what one of our magazines urged on the country last year. The people who say that we ought to conduct the affairs of the defence of this Empire upon ordinary business principles do not know what it all means—do not know what they are talking about. In my paper on the 20th February I went more into detail on that point, to show that what we all recognised as "ordinary business principles" do not go further than their application to the measures which have been the subject of recommendation of Mr. Clinton Dawkins' Committee, the report of which appeared in the *Times* of the 6th inst. If you take the nineteen recommendations of that Committee you will find that seventeen of them refer to matters of administration and management of the daily business of the War Office, and have very little to do with real Army reform. They are all questions connected with the War Office which have very little to do with the art of warfare or the preparations for it, except so far as they deal with the running of the machine in time of peace. A careful study of them will elicit the fact that there is not one which has not formed the subject of report and recommendation in the past. There are only two of the recommendations which really have anything to do with the real preparation for time of war. I assert that every one of the violations of ordinary business principles by the Admiralty and War Office are due to our Parliamentary procedure. What we want to-day is a body of men drawn from the most experienced of the officers of both our Services, a body of men who shall have nothing to do but to dwell upon all the complicated questions of war, and to watch what is going on on the other side of the peace horizon, which will deal with the subject in such a way that every principle which has hitherto been neglected shall be formulated and made intelligible and brought straight up to the mind of the British public, as represented by the three estates of the realm.

The CHAIRMAN (Sir John Colomb):—I shall conclude by proposing a very hearty vote of thanks to the gallant lecturer for his extremely suggestive and most thoughtful paper. I should like before doing so to make one or two very brief remarks. I think the Institution is very much indebted to the gallant General who has prepared this paper. He has requested us to read the paper when it appears in the *JOURNAL* and when we read it again I feel sure we shall find it only emphasises the fact that the subject requires a great deal of study and thought in order to get to the bottom of this very abstruse question. For it is a very abstruse question. I find myself in a great difficulty. My sympathies are all with the Navy and the Army, but, I also know something of the internal working of Parliament, like my honourable friend Colonel Sandys. I am bound to say, I think, the only way of accomplishing the object in view is by that education of the man in the street, which was spoken of by Sir Edward Hutton. You will have a very great deal of education to give him, for I am sure Parliament will not give up one iota of what it considers its rights and privileges without tremendous pressure from outside. One very curious thing I may mention. In the simple matter of procedure when dealing with the Estimates, Parliamentary procedure is especially framed so that a question of high policy cannot be in order on either the Army or the Navy Estimates. I have tried to raise it during the last sixteen years on several of these occasions, but have never succeeded. As I have said in the House, you are obliged, as it were, when the Navy Estimates come on to get into a water-tight compartment and put on blue spectacles and see nothing but blue water, and you must not consider military aspects of defence at all. On the other hand, on the Army Estimates you have got to get into a red water-tight compartment, put on red spectacles and ignore the existence of the Navy altogether. A great number of men would like to see that system broken down inside the House, but I despair, owing to the enormous difficulties of getting anything

altered in Parliamentary procedure under the Constitution. I am sure Colonel Sandys will bear me out in that. I merely mention this to show that as it is difficult to do a very simple thing which would be for the benefit of the public service, it would be much more difficult to get Parliament to accept an Advisory Board which would really poach upon its own special preserves. You must recollect that Parliament thinks it is the centre and source of all wisdom—the “enquire within” upon everything; and anybody in any service who attempts for one moment to dispute that position immediately puts the House on its guard, and it will not give them standing ground at all. I only mention these things to show the difficulties of the question. But there is one practical matter about which I confess I am a bit puzzled by my gallant friend: the lecturer makes the proposal that the Estimates would be prepared and submitted to Parliament by men whose positions are not changed by a party vote.

General WEBBER :—I think there is a little confusion. The Estimates would be prepared and submitted to Parliament exactly in the same way as they are now.

The CHAIRMAN :—The original framers of the Estimates would be independent of party vote.

General WEBBER :—They would be the Secretary of State and the First Lord of the Admiralty, advised by their advisers as they are now in every respect; the Estimates would go forward exactly in the same way as they do now. They would be treated in exactly the same way as they were before Lord Randolph Churchill's Committee in 1888. The Estimates that had been submitted by the then Secretary of State for War were referred by Parliament for the observations of Lord Randolph Churchill's Committee.

The CHAIRMAN :—However, I would only point out that anything of the sort would be extremely difficult. Votes would have to be defended and decided in Parliament by party votes, and that is where the difficulty comes in. I am bound, however, to say that we are greatly indebted to the gallant lecturer for putting before us an elaborate and very thoughtful paper on this question. There can be no doubt that there is a gap in our administrative arrangements. I venture now to repeat what I told the House of Commons in the recent debate on Army reform that the Defence Committee of the Cabinet is, to my mind, nothing but a pious political imposture—it is nothing else, and the sooner we get something or some body responsible for principles of policy of defence, the better. I am sure you will join with me most willingly in a vote of thanks to my gallant friend General Webber.

SOME IDEAS OF A SOUTH AFRICAN ABOUT THE WAR.

By Mr. T. L. SCHREINER.

Monday, 8th July, 1901.

Admiral Sir N. BOWDEN-SMITH, K.C.B., in the Chair.

The CHAIRMAN :—The name of Schreiner in connection with South Africa is so well known to all of you, that there is no necessity for me to introduce the gentleman who is to read the paper to-day. I might mention that he is the elder brother of the late Premier of Cape Colony.

LECTURE.

MAY I say this word in explanation of my appearing before you to-day—that it has not been my own doing. I addressed a meeting at Dorking in March last on the general South African question, and Colonel Helsham-Jones, who filled the Chair on that occasion, asked me at the close of the meeting if I would be willing to address a meeting of military men. I said, certainly; but when I said so I was under the impression that a similar address to the one I had given at Dorking was intended. Upon learning that, as far as possible, politics were to be avoided, and my address limited to the military aspect of the war, I felt that it would be as well for me to withdraw from the promise I had made, because, while I do profess to have a grip of the political situation in South Africa, I do not pose as a military authority or expert. But I found I was not to be let off from my promise, and yielding—whether wisely or not, I cannot say—to a natural repugnance to go back from my word, exhibited the military virtue of blind obedience to orders, and stand before you to-day as the consequence, to share with you, for what they are worth, some ideas about the war of a loyal South African, whose only title to your attention is that he has taken the very deepest interest in all that led up to, or has occurred in the course of, this war, that he is most whole-heartedly loyal to Britain and the Empire, and that he is intimately acquainted with the circumstances, topography, people, and history of South Africa—his native land. You will please not expect more from me than a simple talk about these matters; and you will forgive me any omissions or imperfections in this paper, when I tell you that I have been so hard pressed by other work in connection with South Africa, that I have only within the last few days been able to hastily put pen to paper on this subject.

War Reminiscences of Fifty Years Ago.—As a child, my earliest remembrances in South Africa were about war. My father was a

Wesleyan missionary in what is now part of the Orange River Colony, near Ficksburg, then peopled by native tribes, who were continually at war with each other and with the British forces under Sir George Clarke and Major Warden. My father and the Chief Sikonyella, among whose tribe he laboured, were thoroughly loyal to the British; and the result was that our station, Umpukane—now Sephton's Farm, near Clocolan—was attacked two or three times, and finally destroyed and burnt to the ground by Molitzane's tribe of Basutos in 1851. We took refuge at another Wesleyan mission station, Lishuane, now a farm, Groen Kloof, about fifteen miles from Ladybrand, and for months we were expecting death any day at the hand of the natives, especially on the day of the battle of Viervoet, when we heard at a distance of some five or six miles the boom of English cannon for the first time.

I was trained from childhood to love the British flag and the British Army, and to look on both as the symbol of justice, liberty, and safety; and now I am growing old, I am of the same opinion still.

I must confess, however, that when, in 1852, we moved for refuge from Lishuane to the village of Winburg in the Orange River Sovereignty, the first drunkard that I ever saw in my life was one of Her Majesty's soldiers. Drink is still the worst enemy of the British soldier and of Britain, though, thank God, owing to the total abstinence efforts of Lord Roberts, Lord Wolseley, and others, an immense improvement has been effected with regard to this matter in the Army within the last twenty years. As a boy it was my delight, in Bloemfontein in 1853-54, to accompany my father in his ministerial visits to the soldiers' barracks and camps, and at his temperance meetings with them; and I sorrowed with him when, in 1854, the Union Jack no longer flew over the fort, owing to the deliberate abandonment of the country by the home Government. Now the old flag flies there once again, and *will fly*, not through a war of aggression on England's part, but a war of defence against the uncalled-for attack of the Orange Free State, who, without a shadow of a quarrel with Great Britain, deliberately allied itself with the South African Republic, and has thus thrown away its independence for ever.

I am reminded here, too, how in after years I sadly sat for hours at such places as the remains of the English defence camps of the 1880-1881 Transvaal War, outside Potchefstroom, Pretoria, Rustenburg, Lydenberg, etc., at Bronkhorst Spruit cemetery, and on the summit of Majuba, pondering and sighing over the folly of England's rulers, that had made such places possible, by her refusal to act up to her God-given responsibilities in South Africa in the past. She has paid heavily during the last two years for that folly and neglect, and I think she has learnt the lesson at length.

The Army's Work in South Africa.—The work done by the British Army in South Africa during the various native wars in the past century is not sufficiently kept in mind, or valued, as constituting a strong claim on behalf of the Empire to the gratitude and allegiance of both Boer and

Britain. Leaving any criticism of those former wars out of the question, I make bold to assert with regard to the present war, that no Army of any other nation would have done better than our Army has done. Officers and men have been as brave as lions, and, despite some unexplained surrenders, have nobly upheld the best traditions of the past, and proved that the Empire has no need to fear any deterioration in the fighting capabilities of its sons.

Special South African Difficulties.—That our soldiers were unaccustomed to the conditions of war which they went to meet in South Africa is quite true, and furnishes the key to much that puzzles the people who have stayed at home. It seems wonderful to these arm-chair critics that 250,000 men have not yet been able to entirely subdue some 50,000 Boers and their allies. But consider what they have had to contend against. They, and all the paraphernalia of war, and provision for the same, have had to be transported 6,000 miles across the sea. Next consider the immense area over which the war has had to be carried on, which is shown by the fact that there have been over 2,000 miles of railway to guard. Consider that all troops and provisions, etc., have had to be carried by these single lines of railways, passing through a country actively or passively hostile.

Consider the trying nature of the climate, especially to new-comers—the burning, blistering heat of the sun in summer, shining down from cloudless skies, penetrating through the clothing to the skin as that from heated iron would do, and in itself exhausting one's vital powers, followed, perhaps, by icy cold winds from the Southern Pole—the hot winds from the North-West, which seem to blow from a furnace mouth, and parch and dry up one's whole system—the tremendous variation of temperature between day and night—the heavy night dews—the bitter frosts of winter on the high plateaus of the Cape Colony, Orange River Colony, and Transvaal—the dust storms, in which sometimes for days the air is laden with choking dust and blinding, driving sand that obscures even the light of day—the terrific electric storms, in which the strokes of lightning and the roar of thunder never cease, while the rain pours down with a force that no clothing or even canvas avails anything against, or in which as a variation the hailstones sweep all before them like a fusillade of shrapnel.

Think of the difficulties of travel immediately one leaves the line of railway; the absence of made roads, and the presence of deep soft red sand on the plains and black morasses in the hollows; the facility for losing one's way in a country where these tracks have no finger posts or directions, and houses are often 8 or 10 miles from each other; the long distances to be travelled from water to water, and its often scant and disappointing supply when reached; and not least, the absence of firewood or other combustibles over a very large portion of the country.

Think of the effect of all these things, not only on the men, but on the animals which are ridden or driven, and what these suffer from the absence of nourishing herbage, except for a few months of the year, or after rain. It is a fact that the finest imported horses with their big

heavy bodies are not suited to the climate, and fail to do as much as the slender wiry horses of the country.

Amongst other difficulties in the way of our troops, think how difficult it is for a new-comer to judge distances in South Africa, owing partly to the fact that in England the eye is rarely able to see to a great distance, because of trees, hedges, houses, and other obstacles, and a few hundred yards is generally its limit; whereas, in South Africa, vision is, as a rule, unimpeded for miles; and I believe that it actually takes some considerable time for the eye of a soldier from England to become altered in its power of vision, so as to accommodate itself to the wider spaces of South Africa. The eye of the South African, through long practice, can notice appearances at a distance, and know what they indicate, which are absolutely unseen by the new-comer. Think what this means in long-distance artillery and rifle-fire. Then, in the important matter of judging distance for the purpose of firing, the air of South Africa often deceives the new arrival. On a hot day, even in the early morning, the air quivers and undulates with heat waves, which distort the appearance and apparent distance of everything, and mirage abounds on all sides, and the new-comer, entirely unaccustomed to these phenomena, is entirely at sea. A horse will seem as big as an elephant under the effect of these transformations, and I have more than once witnessed the curious spectacle of the reflection of a herd of oxen pacing one after another along a very level piece of veldt without vegetation, such as the bottom of a dry vlei or pan, each ox being double, and the feet of the real ox and those of the reflection seeming to touch each other.

Think again what difficulties beset our soldiers, owing to their not knowing their way about the country, and having to keep to the wagon tracks, while the Boers, being thoroughly acquainted with the locality of each farm, river-drift or ford, and mountain path, have been able to cut across country from point to point, and to outstrip our forces.

Then there is the language difficulty. The Boers and the coloured people speak Dutch, which our soldiers do not understand, and they are thus at the mercy of interpreters, and often these may not be at hand when important information is needed. The very phrases used in South Africa about many things can only be understood by one acquainted with them. Thus, distances are reckoned by hours, at the rate of six miles an hour, but "een ander half uur" (literally "another half-hour") does not mean what it seems to mean, namely three miles, but "an hour and a half," or "nine miles."

Boer versus British Methods of Warfare.—Other difficulties have arisen from the contrast between the British methods of war and those of the Boer. The bulk of our men have been on foot, and the Boers have all been mounted, and in a country like South Africa, one mounted man is worth at least three or four unmounted. When war seemed imminent in 1899, I felt certain, in common with many other South Africans, that England would be able to do nothing effectual against the forces of the two Republics unless she had at least 50,000 mounted men. People to whom I have said this have replied, why did you not write and tell this

to the Colonial or War Office? Well, perhaps I did fail in not doing so; but one does not like to pose unasked as the mentor of those who ought to know all about these matters. Experience has taught the War authorities many lessons now, which we South Africans knew it would.

The Dutch method of fighting has always been that of allowing each burgher to do his individual best, first, to protect himself, next to inflict as much damage as possible on the enemy with his rifle, and then, when necessary, to retire by means of his horse to a safe distance to prepare for doing the same thing to-morrow. Retreat is an essential part in his game of war. He never dreams of attacking the enemy in such a way as to cut off his own chance of this. There have been some exceptions to this rule in the present war, such as the attack on Caesar's Camp and Wagon Hill at Ladysmith, Eloff's attack on Mafeking, and one or two recent fights; but even in these the general mass of Boers could not and did not venture to join, or the result might have been vastly and sadly different for us. The saying has been proverbial in South Africa that, in fighting the Boer, you must leave him the means of retreat and he will take it, rather than come to a hand-to-hand conflict. Not that he is a coward, but that this is his method of fighting, perhaps largely owing to the fact that he has always felt in his conflicts with the natives that he could not afford to lose men. He is good at defence so long as a way of retreat is open; but he will give up the strongest position if once he sees reason to believe his way of escape is threatened; and the horse occupies the principal place in the carrying out of these ideas. We South Africans therefore did not feel as elated as perhaps you were in England over the retreat of the Boers from one position to another, except when they themselves reckoned such a retreat as a defeat.

This fatal facility of the Boer for retiring in order to fight again, and his unwillingness to attack when attack means certain and severe loss of life, were in themselves sufficient to indicate that he could never hope to win finally in a war with an enemy who did not care for defence and retreat so much as for offensive operations; and if there had always been a sufficient number of cavalry or horsemen to follow up the Boers upon their retreat from strong positions after action, the war might have been over long ago. The Boer with his two horses and his light equipment has been able to get many miles away from immediate danger after many a heavy fight, while the poor infantry soldier must patiently bivouac on the field of battle, and slowly and laboriously follow the enemy up next day, and perhaps many days after that.

In my opinion, infantry in South Africa should be mounted, in order to cope successfully with the methods of Boer warfare. The Boer takes but little commissariat with him; a few pounds of biltong, *i.e.*, jerked or dried meat, and a few pounds of biscuits, will keep him going for as many days, and these he carries with him. Our military authorities might well take a lesson from him in this respect, and accustom our soldiers to follow his example. Individualism is carried to its extreme in the Boer ranks, and seems to me not sufficiently allowed or fostered amongst our soldiers.

Boer versus British Shooting.—Another matter in which, in my opinion, the Boers had an undoubted advantage over our soldiers, especially in the beginning of the war, was in the superiority of their shooting. I think there can be no doubt about it that they were the better marksmen then, though, after their eighteen months' practice in South Africa and in the South African air, I believe our men are as good if not better marksmen now, and this is one of the advantages Britain has gained from the war.

The Dutch have, for the last twenty years, been assiduously practising the art of shooting straight, largely as a preparation for the great conflict with Britain. Where, in England, youths and men give their time and attention to cricket and football, the Dutch in South Africa have given it to practising with the rifle; and to be a quick and straight rifle shot has been the highest qualification to esteem and respect.

At the little seaside spot where I generally spend my Christmas and New Year holidays there are always many Dutch, whose chief employment is practising with the rifle all day long. I remember one day passing a group of these friends, who were firing with Lee-Metfords at bottles placed about 120 yards away. They asked me, with a kind of friendly contempt, to have a shot. I accepted, and though I did not hit a bottle, my shot passed about a couple of inches above one. My nephew, a lad of sixteen, was then offered a shot, and he had the good fortune to knock the head off a bottle. You should have seen the changed look of respect which came over the faces of these men as they said, "Magtig, julle schiet goed" ("Goodness! but you shoot well").

There is no doubt in my mind that individual marksmanship is of inestimable value, and that enough in this direction has not been done in the Army or Volunteers, not to speak of the general British public.

Lessons from the War.—One great lesson that the war ought surely to teach us is the necessity of being prepared to defend the Empire at any point where it may be attacked, and the value to that end of citizen soldiers; nay, that is the incumbent duty of every man and youth who professes love for the Empire to put himself in a position to defend it by becoming as proficient in the art of quick and straight shooting, of riding and caring for horses, of military drill and manoeuvres, as it is possible for him to become; and that it is the duty of the Government to make all necessary provision for the attainment of these arts by the people. Forced military service is against the genius of the Briton. Let us see to it that we give an example to the world of voluntary military service instead. The achievement of these ends will be far easier than people imagine if once their hearts are set on them. We are told that England is so densely peopled that rifle ranges are hardly obtainable, but I have seen many places where such ranges could safely be established. Remember that the great point is to get people to know how to handle the rifle, to take aim quickly, and to shoot straight, and this can be attained in a 200 or 300 yards range quite as well as at longer distances. It is not slow deliberate target firing that is needed, so much as quick straight shooting at smaller and especially moving objects.

What is needed is, that some of the energy and devotion which are now given to the national games of cricket and football, to boating and golfing, etc., should be devoted to this best of all preparations for national defence. What an added dignity will a man be conscious of when he can truthfully say: "I love England and the Empire, and I am able to do my part to defend her." Women, as well as men, should take the deepest interest in this question. If it is a right and Christian thing for a man to be ready to defend his country, it is a right and Christian thing that a woman should help and encourage him therein, and right and Christian that parents should bring up their children to recognise this as a part of their duty to their country.

The Regulars and the Colonials.—Not being a war expert, I do not intend to make any comparison as to the comparative value of the Regulars and the Volunteers, nor as to the comparative value of the different branches of the Army, nor do I intend to make any comparison between these and the brave bluejackets who carried unsullied the renown of England's first line of defence—the Navy—up the slopes of Graspan in Griqualand West, at Ladysmith in Natal, and elsewhere. All have been necessary for the successful carrying out of the war in South Africa; but I wish to emphasise what I have already pointed out as to the value of mounted riflemen such as the Boers themselves are, and the immense value of accustoming such men to individual, and yet common action against the enemy. As to the Colonial forces, in a war in which Canadians, Australians, New Zealanders, Cape Colonists, Natalians, and, last but not least, the much maligned uitlanders of Johannesburg, have all vied in friendly rivalry with each other in the display of conspicuous bravery and endurance, it were invidious to make a comparison where all have done so well. These Colonials have no doubt given many a wrinkle to each other, and to the Regular forces, where they have been willing to accept them; and the advantage is not all on one side, for there is many a thing that Colonials may in turn learn from the Regulars. I believe that the successful Army of the future must combine much of the two systems. We cannot do without the knowledge drill, without the acting together of large bodies of men at the word of command, without manœuvres, but we must give scope for individualism in warfare to a greater extent than has ever been done before.

All Things have Worked for Good.—To those who know the circumstances of South Africa, and what was necessary for its future welfare and prosperity under the British flag, and who at the same time acknowledge the working of a Higher Power in all earthly events, the progress of this war seems to have been most providentially ordered to bring about the best results, and even the circumstances which have appeared, at first sight, cause for regret, have turned out for good.

Frontal Attacks.—Thus the frontal attacks at the beginning of the war, the battles of Talana Hill, Elandslaagte, Belmont, and the like, though productive of a large loss of life in officers and men, were absolutely necessary to dispel from the Boers the fixed and settled idea

which they had fostered ever since Majuba and Bronkhorst Spruit, that both English officers and men were fools and cowards, and to be despised.

A certain Bond member of Parliament in the British Colony of the Cape of Good Hope voiced this idea when he publicly stated years ago that "forty thousand English soldiers were a mere breakfast for the Transvaal," and during the present war the same man is reported to have said that he thought no more of a British soldier than of a fly on his nose.

may remark by the way that the breakfast seems to have disagreed with the Transvaal, and the nose has not come off best in the conflict with the fly. People here can hardly realise how deep these generally believed slanders had eaten into the hearts of loyal South Africans who knew them to be false; and nothing but those magnificent charges of our officers and men, perfectly regardless of danger and death, sweeping everything before them, could ever have killed this delusion amongst the Dutch; *but they did kill it, once and for all.*

It is not too much to say that the Boer never recovered from the moral effect of those first frontal attacks of the British, but knew henceforth that he had believed a lie, and that he could never hope to succeed against men who rushed on to death and victory with such fierce joy.

I remember a Dutch farmer in the Colony, all of whose sympathies were with the Republics, and who was ready to go and help them, saying to me after those first British onslaughts in Natal—"Well, if they" (meaning the Boers) "can't do better than that, they had better give up the war at once."

Ah! Those brave heroes, officers and men, who redeemed the name of Briton and Britisher from the foul and lying stigma which had been fastened on it for 20 years! They did not die in vain; and for ever and for ever we and our descendants will stand with bared heads in the presence of their names, their memory, and their deeds! And we can and do from our hearts thank God that things were providentially so arranged, that England had no overwhelming force at the beginning of the war, which might have rendered such frontal attacks unnecessary, and have prevented the Boers from learning that, still, as in days of old, there is no braver or more fearless man on earth than the British soldier.

Disasters and Repulses.—Then there were the terrible disasters and repulses of what we who love the Empire will always think of as the *dark December* of 1899. Stormberg, Colenso, Magersfontein! names which ought ever to keep us low before God. But how necessary they were to wake the Empire to a sense of the magnitude of the danger and the real strength of the enemy! How far they were caused by mistakes from a military point of view it is not for a civilian to decide; but I may be allowed to say that the Stormberg disaster was calculated to teach this great lesson, that you cannot in the exhausting South African summer sun expect soldiers to do what they could easily do in the milder climate of England, that even British soldiers cannot fight when they are absolutely exhausted for want of sustenance, and that it is easy to lose the right way in South Africa.

As to Colenso—well, both there and at Magersfontein it was the misfortune of our forces to come in contact for the first time with the effect of modern repeating rifles used on the level from behind trenches of defence, and the result was to a large extent what Mr. Bloch had foretold. England suffered there as an example to others, and to herself in the future, and, though the price was heavy, the lesson had to be exemplified somewhere. The worst is, England does not seem to get much thanks from the world for her vicarious sufferings.

Of course we know what a mistake it was at Colenso to have advanced the battery of ten guns so far that it fell a prey to the Boers' marksmanship, and, at the risk of seeming to be wise after the event, I would say that it seems a pity General Buller could not from the first have adopted the very plan which he carried out successfully finally, namely, that of working his way step by step from Monte Cristo and Hlangwane Hill onwards.

Perhaps the greatest interest attaches in everybody's mind to Magersfontein, owing to the disaster to the Highland Brigade and to the death of their brave leader, Major-General Wauchope. I have not yet visited all the battle-fields of South Africa, as I hope to do some day, but I have carefully inspected and followed Lord Methuen's victorious march from the Orange River camp to Magersfontein. I have already spoken of Belmont, and to this name must be added those of Graspan, Enslin, Modder River, as names that Britishers may be proud of. The Boers had fortified the Belmont kopjes in such a way as to show that they expected them to be impregnable, at all events for weeks or months. Our men stormed the heights and took them within a few hours, and instilled that fear into the Republican forces in the west which Talana Hill and Elandslaagte had created in the commandoes in the east.

Graspan, Enslin, Modder River followed close on its heels; and then came the repulse of Magersfontein.

Why? Well, the one great reason was that the Boers had been taught by experience at Belmont that "schansed" (*i.e.*, fortified) kopjes availed nothing to stay the British soldiers' advance, and they accepted for the first time the advice of their Continental allies, and made trenches on the level plain, thus giving to the Mauser its fullest and deadliest effect.

I have studied the spot and surroundings where the Highland Brigade fell on that fatal December morning. It is, I should say, some four hundred yards distant from the kopje which formed the apex of a triangular block of kopjes, and which was, I take it, the objective of the proposed attack by the Highland Brigade.

A trench, carefully concealed with thorn bushes, had been dug in the veldt along the front of this kopje at a few yards distance, *and had been extended into the bare level veldt for about 400 yards.* The decision as to the responsibility for the Magersfontein disaster seems to me to lie in the answer to this question: Were our Generals aware of this new departure in the method of warfare adopted by the Boers or not—this making of trenches on the level? If they were, and knew the position of these

trenches, then a great mistake was made in the darkness by those who led the Highland Brigade within forty or fifty yards of this extended trench in close formation; but everything seems to me to go to show that they could not have been aware of the existence of this trench, but believed there was nothing between them and the kopje mentioned but some three or four hundred yards of simple bare veldt, and if so they were justified in not having deployed earlier. We shall, I suppose, some day get to know whether the existence of these trenches was known to Lord Methuen and General Wauchope or not. If it was not, then the Intelligence Department comes in for responsibility. In that case, however, in my humble judgment, the plan for attacking the kopje made by Lord Methuen and attempted to be carried out by General Wauchope, seems to have been a justifiable one, and one which might have proved successful, as it did at Belmont, and given a great victory to the British forces, always, mark you, on the supposition that the trench in the veldt did not exist; but if the existence of this trench on the level veldt was known—which it seems to me impossible to believe—then there was a serious miscalculation in the disposition of the marching force which led to the disaster. To put it simply: had the Highland Brigade known of the trench, deployed in time, and charged it in flank as well as in front from the distance of forty or fifty yards, no Boers that ever were born would have had the pluck to await the onslaught of cold steel, but they would have fled to the kopje, which would then have been stormed and taken as Belmont was taken; and the central position with its gun once in our hands, nothing could have saved the Boers from defeat. The evidence of a trustworthy Bloemfontein correspondent who was with the enemy goes to show that the Boers in the trenches were not expecting the attack, nor on the *qui vive*, until the accidental discharge of a rifle by one of the British soldiers awakened them; and further, that a certain portion of the British forces had actually got round and beyond the end of the trench without knowing it, and were mistaken by the Boers for some of Bisset's ostriches. There is an explanatory supposition with regard to these trenches which is worth mentioning. Were they dug in the soft yielding red sand by the Boers at night, and was the last piece of 400 yards dug out on the very night of the attack? If so, nobody was to blame for the disaster. I hope that you will not think that I am going beyond my text in giving you these ideas and convictions of mine, formed from close study on the spot, of what might and might not have been in connection with this, one of the saddest incidents of the war. Though it was the misfortune of those brave men—the bravest of the brave—to be exposed, when huddled together like sheep, to a murderous rifle fire from trenches on the level at forty or fifty yards distance, and to fall like grass before the scythe, and thus to prove the deadliness of modern weapons of precision under certain circumstances, let no one think they died in vain.

I have stood at the cemetery, situated not more than one hundred yards from Modder River railway station, where their bodies rest; and if my feelings are a sample of what others feel and will feel, then I say

no heroes that ever fell in the most successful assault are closer to the hearts of loyal South Africans than these, who fell not as victors, but as victims, in the struggle to establish the principles and practice of justice, liberty, and fair play to all men throughout South Africa!

The thought that springs involuntarily to each loyal heart is to pledge itself that what they died for must and shall be secured and retained for ever, cost what it will.

Other disasters there have been, but time does not allow of my dealing with them.

Lord Roberts' Advance.—Magersfontein, Stormberg, and Colenso were, I believe, providentially allowed to take place to rouse the Empire to see that its existence was at stake, and once that was done, loyal South Africans felt that the chief danger was over. Loyal South Africa, that had been chafing at not being allowed to help the Empire, was now allowed to come forward and show the world that there were thousands of hearts in South Africa as brave, true, and loyal to the mother country as in any other of her Colonies; and thus the disasters were blessings in disguise, for they knit the scattered members of the Empire together into one heart and one purpose as had never been the case before.

Troops from all parts were poured into South Africa. Lord Roberts assumed the supreme command, and initiated those wonderfully planned and successful movements which led to the retreat of Cronje, the relief of Kimberley, the surrender of the Boer commando at Paardeberg, the entry into Bloemfontein, the magnificent advance to Johannesburg and Pretoria, and which substantially assisted towards the relief of Ladysmith and Mafeking. No words of mine are necessary to intensify the universal appreciation of the services which his military genius thus rendered to England and the Empire. Fittingly raised to an earldom, he is still to the hearts of the mass of British soldiers and civilians Bobs!—our only Bobs!

The Sieges of Kimberley, Mafeking, and Ladysmith.—The features of the war in which the greatest interest was taken by both sides and the world at large, and which roused the deepest feelings of the people of the Empire, were the sieges of Kimberley, Mafeking, and Ladysmith, lasting for four, seven, and four months respectively. The story of the heroic defence of these towns, especially of the two last named, with which the names of Colonel, now General, Baden-Powell, and General Sir George White will for ever be linked, will live in history. Public interest in Mafeking and Ladysmith somewhat dwarfed that in Kimberley, which was under the military command of Colonel Kekewich, but brave deeds were done there too, and Mr. C. J. Rhodes and the De Beers Company proved themselves friends indeed in the hour of the Empire's need. These sieges proved that fearless British pluck, grit, and endurance, whether exhibited by soldiers from the old country or colonials, by men or by women, was the same as in the palmiest days of England's past. Considering their unpreparedness for a state of siege, the situation of the towns, the lack of guns and ammunition at Mafeking and Kimberley, and even at Ladysmith, the superiority of the Boer artillery, the want of

sufficient food, the number of women, children, and natives shut up with the fighting men, the disease which prevailed, there is nothing braver written in the annals of the Empire than the way in which these towns were defended. Let us not forget, by the way, the brave defence of Kuruman by a small band of white and coloured men, even though they had to surrender at last through want of ammunition to a vastly superior force.

The result of these sieges proved the power which modern weapons of precision give to defenders behind properly made trenches and earthworks; but I make bold to say that, had the cases been reversed, and the Boers been the defenders of these places, and the British the besiegers, not all the advantage of quick-firing rifles in defence would have availed to prevent their capture; but the unwillingness of the Boers to carry an assault when it means severe loss of life to them stood us in good stead. There were some notable successful night attacks made by our men both at Ladysmith and Mafeking, and I have more than once wondered why the British have not attempted much more in this direction. A thrill of just pride and exultation passes through us as we think of the brave deeds done in connection with these sieges and elsewhere, which constitute a claim of the Empire to South Africa, and of South Africa on the Empire, which cannot be lightly set aside.

Was Peace Possible upon Pretoria's Fall?—There are those who regret that attempts at peace were not made on the fall of Pretoria, but such attempts would have been futile. The Boers still believed that they had had the best of it, and the only peace they would have accepted would have been a false peace—a peace on their own terms, a peace which would have given them their independence as Dutch Republics, and have exposed the Empire in the future to another great war in South Africa, where no true peace can exist till the Boer has been allowed to try his best and been thoroughly beaten by England. When he acknowledges this, he will settle down as a good British citizen—not before; so we may be thankful that no attempts were made in the direction of a false peace on the taking of Pretoria.

Invasions of the Cape Colony.—The first invasion of the Colony is another instance of a calamity which was a blessing in disguise, because it proved the real purpose of Republican Afrikanerdom to overthrow Britain's power, and it also proved the existence of disloyalty to Britain throughout the Dutch population of the Cape Colony; for some ten thousand Dutch British subjects joined the invaders with alacrity and rejoicing in the districts in which they appeared: and have since been taught the much-needed lesson that you cannot rebel with impunity. So too, the second invasion of Cape Colony is not altogether to be regretted. The Boers had always expected the colonial Dutch to help them, and these did so in the first invasion, but common-sense and self-interest prevented people of substance from doing this after the annexation of the two Republics to the Empire; and it was the very best thing that could have happened for the Empire's interests that the guerilla forces of the Boers should sweep once more into the Colony, and pillage and loot the

property of Dutch farmers, and treat them badly for not coming to the help of the invaders. The Boers have been cutting the throats of their own cause by so doing, and we may be thankful. Right up to the present time the marauding bands that are devastating the Colony are really strengthening the British cause in South Africa.

Care of Boer Women and Children.—That the women and children of the Boers should be thrown on England's hands seems to me from a military point of view a very great dead weight against us, while it sets the Boer free to do nothing but fight us; but when one considers that the Boer women, through ignorance, have been the bitterest enemies of England, and believed English soldiers to be monsters of lust, cruelty, and barbarity, there is scarcely any price too high to pay to give them the opportunity of finding out by contact with the soldiers that these are noble, kind-hearted, and chivalrous. The moral effect of this for good in the future of South Africa will be incalculable. It is lamentable that Englishmen and Englishwomen should be found who can so misrepresent their country's humane action *re* the Boer women and children, as to lend a handle to Paul Kruger and the enemies of England, to falsely accuse her of barbarity; and to use these false accusations for the purpose of hampering the Government in the carrying on of the war.

Alleged British Brutalities.—It is well too, that our soldiers have been mendaciously accused of brutalities and outrages, because these foul charges have led to investigation, and the result has been to clear our brave fellows from any shadow of guilt in connection with such charges, which have recoiled on the heads of those who made them and circulated them.

Refusal of Terms by Boers.—The very refusal of the Boer leaders to accept the liberal terms lately offered them, and the consequent prolongation of the war, is not altogether to be deplored, for it has revealed the reality of the incompatibility of the Boer system of Government to exist alongside that of England, and every day the war is prolonged tends to the strengthening of the position of the Empire, and the weakening of that of the Boers, who seem insanely bent on destroying themselves as a people,—witness the proclamation just issued by Messrs. Steyn and Schalk Burger.

No Cause for Despondency or Impatience.—There is, therefore, no cause for us to lose heart or to become despondent or even impatient. For the sake of the consolidation of the Empire, for the sake of the putting of matters in that great South African possession on a proper basis, for the sake of the opening up of the Dark Continent to the benefit of both the Dutch and English, and the black man, the Empire can well afford to spend as much as is necessary to see this thing through.

Responsibility for the War.—The responsibility for the war and all the suffering and sorrow it has brought to South Africa, and to many a home in other parts of the world, does not rest on the shoulders of England, who did all that she could to obtain a peaceful and satisfactory settlement of the matters in dispute between her and the South African Republic,

consistent with her supremacy in South Africa; but it rests upon the shoulders of Dutch Republican Afrikanerdom, which, in its blind arrogance and mad ambition, prepared for and went to war with the Empire rather than give those political rights to foreigners who settled in the country, which it was bound to give by the terms on which it received its independence from England. No other course has been possible for England to pursue than that which she has taken, unless she once again abandoned her responsibilities in South Africa; and the whole Empire has backed her up in her determination not to do so, but to fulfil them.

Some Moral Aspects of the War.—There surely has never been a war carried on more humanely than the present one on both sides. England has cared for the wants of her prisoners of war and the women and children of the enemy as no other nation has been known to do. The absence of brutalities, outrages, and crime on the part of the 250,000 British combatants has simply been wonderful, and has established a record that will not easily be beaten.

The Boers, too, have behaved well on the whole, except to some of their own people who have surrendered to the British, and to the blacks who have been on the British side. It is not in the Boer nature to ill-treat his enemy, provided that his enemy has a white skin, and as for white women and children, it is unthinkable that a Boer would be guilty of outrages against these. Blacks he might murder and torture, as being nothing more than mere animals in his sight; and it is awful to even think of the saturnalia of brutality towards black and coloured people which would have prevailed over the length and breadth of South Africa if the Boer cause had prevailed even for a season. While, too, I claim for our soldiers and the British colonials the very highest title for fearless bravery, I would not deny some of the same quality to the Boers, only their style of fighting does not conduce to an exhibition of it.

As to the charges against them of brutality to wounded men, though there seem to be undoubted instances of such, these are exceptions which prove the rule, and their general treatment of our wounded has been good. There is a terrible account in this morning's *Daily Mail* of Boer brutalities to our wounded at the Vlakfontein fight, which, if substantiated, will force me to modify the opinion just stated, but we hope, for the honour of the Dutch, that such will not be found necessary. With reference to the instances in which the use of the white flag has been abused by them, there is this excuse which may be made: that the Boer fights as an individual, firing when he likes, retiring when he likes, and putting up the white flag when he likes; and it is possible, therefore, that some Boers have hoisted the white flag while their neighbours have refused to recognise the action and kept on firing. The unpleasant fact remains that some Boers have used methods with regard to the white flag and ambulances which are not in accordance with civilised warfare. I do not excuse these, but remind you that most of the fighting of the Boers in the past has been with savages or barbarians, who neither employ nor expect any recognised rules of war. Such men as the late Commandant

Joubert and General Botha would never knowingly have contravened the canons of civilised warfare.

We must be preparing our minds to forgive and forget any unpleasant incidents that may have occurred in hot blood between the Boers and ourselves during the course of the war, and at its close be ready to clasp their hands with a "Well fought! old fellow," which may help to soothe the smart of their heart under a sense of defeat; but in order to do this there must be no mistake about the matter that they acknowledge themselves defeated.

England's Part in the War.—There seems no doubt that there was a want of appreciation on the part of the home Government and of the people of England of the magnitude of the struggle into which they had been forced. We South Africans, knowing something of the state of military preparedness of the Republics, knowing the spirit which animated

¹ Much misunderstanding with regard to South African affairs is caused by ignorance as to the various classes among the Dutch of South Africa. Thus, without pretending to make any exhaustive classification, I may say that there are at least four distinct classes: First, we have the refined, well-educated Dutch, who are not to be distinguished from refined, well-educated English people. These are to be found in and near Cape Town and among the older settled towns and districts of the Cape Colony, and are generally members of the Netherlands Reformed Church, which is the largest Dutch Church of South Africa. Then there is a second class, consisting of well-to-do farmers, agricultural and pastoral, who retain much of the Dutch habits of thought and life, but are wishful to have their children—especially their daughters—well educated and refined, and have no hatred of English or the English language. Many of the Cape Colony and Orange River Colony farmers belong to this class, and a few in the Transvaal, and they belong as a rule to the Church already mentioned, or to the Hervormde, which united with the Netherlands Reformed to some extent some years ago. Next, there is a class of farmers who belong to the "Gereformeerde," or as it is commonly called, Dopper Church. These are people who, even when wealthy, are unprogressive, suspicious, bigoted, anti-modern, anti-educational, anti-British and anti-English—men, women, and children. They form the bulk of the Transvaalers, and are to be found in numbers in the north-eastern portion of the Orange River Colony and the same portion of the Cape Colony. Paul Kruger belongs to this class, which is the backbone of Republican Afrikanerdom. A fourth class consists of the so-called "poor whites," or "blitwoners," *i.e.*, squatters, who have no landed property, and live in tents or wattle and daub dwellings on the farms of others. As a rule they are improvident, uneducated, careless, and live from hand to mouth, one hardly knows how. This class is to be found everywhere throughout South Africa, but principally in the Cape Colony. They belong chiefly to the Netherlands Reformed Church. They are not so excessively anti-British as the Doppers, but having nothing to lose, they are only too glad to seize the opportunity which the war affords them of becoming possessed of a good horse and a Mauser or Lee-Metford, and of joining the Boer commandoes in the Colony for the purpose of looting and pillaging, and the excitement and pleasure of shooting some soldiers or their own fellow citizens. It is for these men that the prophets are claiming that complete amnesty at the close of the war shall be now proclaimed to them in the name of England, so that there may be no let or hindrance in the way of their carrying on this diabolical work. I believe that the mass of the Boers who are still fighting consist of people belonging to the last two classes named, with the addition of anti-British enthusiasts from classes one and two, such as Reitz, Steyn, and De Wet as leaders. Of course, these four classes overlap each other, and one might make two or three sub-divisions in each; but the keeping in mind of the classification given will assist towards a comprehension of the South African situation,

the Boers, which was not one of patient resolute defence, but one of exultant defiance and aggression, knowing that more than five out every ten Dutch-British subjects in the Cape Colony were eager and longing to take part with the Republican forces in the overthrow of British power; knowing these things, we did not under-estimate the magnitude of the effort which England would have to make to retain South Africa as part of her Empire, and we feared with a dread black fear, the remembrance of which will never pass away from our memory, lest she should not prove equal to the task. But she girded herself to it unflinching, and has never wavered in her resolve to accomplish it. She has paid a long price already in the precious life-blood of fifteen thousand of her sons, and millions of money. These form her latest indefeasible title to South Africa; and we know she will not falter in the path of duty, even if the purchase price be not yet complete.

The Results of the War.—England did not take up the challenge of Afrikanerdom for the sake of profit, but for the sake of right and justice; nevertheless, when she emerges from the conflict, there will be abundant reward for her and her sons as the fruit of not having shirked her duty. See what she has gained and will gain. The knitting together and consolidation of the Empire—at what price will you estimate that, little Englanders? I say that it is worth more than all the cost of the war—it is priceless. The practical military experience gained by our soldiers; the impulse all over the Empire to be ready to defend it against all comers; the consequent strengthening of the peace element throughout the world, for nothing makes so strongly for peace as to be known to be ready for war; the unhindered spread of civilisation, commerce, and Christianity through the great continent of Africa from South to North; the establishment of the principles and practice of justice, liberty, and fair play to all peoples of all races in that continent; the material prosperity arising from people being allowed to develop the riches of the country without let or hindrance; the moral and spiritual advancement of the peoples under the British flag—are not all these worth the price paid, heavy though it has been?

By every woman who has given up her dearest and best to danger and death, and patiently borne separation and bereavement; by every man who has left home and business at his nation's call; by every bond that has knitted the sons of nobility to the sons of toil in the South African Campaign; by every penny spent, every tax paid willingly, by tears and smiles, fears and hopes, sorrows and joys—the nation has been raised higher, and the national character refined and purified; and can you rightly estimate the worth of these blessings?

Not, I trust, for the sake of selfish aggrandisement, not for the sake of mere military glory, not for the sake of material prosperity alone, but for the sake of the carrying out of the Empire's mission of civilisation in its widest and best sense, and for the blessing of the weaker nations was England forced into this war—and will she utilise its results? Rome perished because she lived for herself—because she recognised no higher aim than her own material power and prosperity. Be it ours to ever

keep before ourselves and before our country the higher, the moral and spiritual welfare of the peoples committed to our charge, and to make military efficiency, success, and glory, and material prosperity ever subservient to this great end—to the advancement of peace and of prosperity, and the establishment of those principles of national righteousness which are the foundation of England's greatness, and which can alone make the Empire a blessing to the earth.

With regard to my own dear native land, South Africa, I believe—if I may use words which I have already used elsewhere—that “God is bringing to the birth out of all the agonies of the past and present a true South African nation—not Dutch nor English, but South African—in which Dutch and English shall blend into one indistinguishable whole, and form a part—and that no ignoble part—of the British Empire; that over the grave of our dear dead—Boer and Briton—there shall arise, *not* the black angel of perpetual hate, as cruel prophets and prophetesses predict, but the white angel of peace, and mutual respect, and love; and that English and Dutch in South Africa shall yet clasp each other's hands over that grave, and pledge, not eternal feud, but eternal troth, under the flag that recognises no distinction between them.”

Major-General C. E. WEBBER, C.B. (late R.E.):—After the emotion with which many of us must have listened to this admirable address from Mr. Schreiner, it is very bold of me to stand up. I really thought when I came here that there would be no necessity for any of us to speak on the lecture, the manuscript of which none of us had seen before its commencement. Such lessons as Mr. Schreiner has been able to draw from what happened in South Africa have been those of an observer—and a very shrewd one—with a very complete knowledge of the circumstances under which the Boers have carried on war both against the natives of South Africa and against the British in the past. But, I think, what has impressed me in listening to this lecture most of all is, that although a year and a half have passed since the most thrilling events of this war have taken place, not only what is called the man in the street, but also the military student, is still completely without such information as was indicated by those few words in connection with the attack on Belmont, which the lecturer has so vividly described. It is one of the extraordinary results of this war, that whereas in connection with any other war that we have been acquainted with, or recollect in the last fifty years, we have had the fullest details, this is the only one in which such detailed information as would enable the military student to form any opinion of what occurred, or to make a study of the subject, is absolutely absent. The why and the wherefore, I think, is due to something which was, you may say, betrayed—although, perhaps, it is not a good word to use—an absence of information which was betrayed by the present leader of the House of Commons in a speech he made at Manchester in the autumn of 1899, when he told the British public that the Government did not know that they were going to encounter an army of mounted riflemen. Those were the actual words he was reported to have used, for I quoted them over the signature “Swastica” in a letter to the *Times* which appeared very shortly afterwards. I think the consideration of that statement explains not only the absence of information in the possession of our authorities, but also in some degree explains the unwillingness to give us since the information which we should like to have, so as to be able to read the lessons of this war in such a way as has been indicated by this able lecture. May I just point to one individual incident, because it affects any conclusion that may be drawn from the actions which were fought in the attempt to relieve Kimberley? At three o'clock on the day of the second of those actions the general commanding the relieving force was perfectly aware and was

perfectly conscious that in order to oblige the Boers to leave their positions—put it that way—it was necessary to outflank them with mounted riflemen. By that hour of the day every mounted man he had was then standing by his horse holding the bridle, and there was not a horse there that had had any water, or could have had any water, since 4 a.m. A dust, impregnated with saline matter, was blowing and was drying up the mouths of the horses and men, and I know, as a positive fact, that there was not a single horse in that body of mounted men which was able, with 20 stone on his back, to put one foot before the other in order to make even a comparatively short movement, to say nothing of a detour of several miles. No wonder then that a night attack with infantry was the only resource of the general. I think that the description which the lecturer has given us of what happened that night during the attack on Magersfontein is the most realistic description of probably what actually took place, and what led to the use of attack by night as the only expedient in the absence of a strong force of mounted men as mobile as the Boers. An attack by night in the absence of mounted men fit to make a flank movement, and in sufficient strength to threaten the flank or the rear of those who defended the position, was the only course to take. Not one word more would I say, except to voice the warm and hearty thanks that everyone present must feel at the delightful narrative to which we have just had the pleasure of listening.

Lieut.-Colonel WILLOUGHBY VERNER, *p.s.c.* (late Rifle Brigade):—As one of the officers who were privileged to see something of the advance from the Orange River, I have heard with the very greatest interest Mr. Schreiner's remarks about the frontal attacks we made. I was unfortunately cut out of the campaign and came home in a few months, and when I landed in England I found everybody was pitching into us for our frontal attacks. I went to see the Commander-in-Chief, and even he asked me what we meant by our frontal attacks. Of course, opinions will differ about them. I do not agree altogether with General Webber as to the incapacity to move of our cavalry on the occasions to which he referred, since I saw them myself pursue for about five miles on the following day, and until we were "held up" owing to the conditions which Mr. Schreiner described, the Boers having fallen back to a very strong position. As regards Lord Methuen's frontal attacks, as he is not in this country to defend himself, I will only repeat what happened the day before the battle of Belmont. I reconnoitred the enemy's position with some Lancers, and having brought in information to Lord Methuen he made a further reconnaissance, and decided on his plans. I ventured to point out that there was a chance of "going round" (as I believe a distinguished American said at Colenso). The answer I got was:—"My good fellow, I intend to put the fear of God into these people," and all I can say is that those who have heard Mr. Schreiner's remarks and who know the story of Belmont and of Graspan, will admit that Lord Methuen did exactly what he said he was going to do.

MR. SCHREINER, in reply, said:—I do not see that the Government can be much blamed for having under-estimated the power of the Boers; there are some things that can only be learnt by experience. As to the point brought forward by General Webber of the possibility of having outflanked the enemy with cavalry at Magersfontein itself, I should like to say that on the right of the battle-field was the Mollder River running along two or three miles distant, and the enemy could scarcely have been outflanked there. Then the kopje which I spoke of was the apex of a triangular block of kopjes, which stretched away for some miles to the west and some miles to the north-east. The cavalry would not have been much good in the kopjes. I am not a military man, but I think it would have been difficult to outflank the Boers on this left side also. It must be remembered too that Lord Methuen had but a small body of cavalry, quite inadequate for such a flanking movement, and even when large reinforcements arrived Lord Roberts did not attempt to repeat the attack on Magersfontein. I am glad we have had corroborative remarks from one who took part in these frontal attacks. I can assure you that what I have said here this afternoon about them is the universal feeling in South Africa. We could

have gone down on our bended knees and thanked God!—and many of us did—for Talana Hill, Elandsbaagte, Belmont, Modder River, etc. They did more good than anything else, in making the Boers understand that they could not stand against the Britishers, and in overthrowing the belief they had held for over twenty years that if twenty Boers were to appear at any spot and there were a hundred British soldiers opposed to them, these hundred British soldiers would turn tail and fly as fast as they could. That was what the Boers believed in their hearts—the men, women, and children believed it—and *that was why they made this war*. I do not wish for one moment to detract from the grand strategy of Lord Roberts and the wide and enveloping movements which drove the Boers forward. The Boer will never allow himself to be outflanked; as soon as there is the slightest chance of it he is up on his horse and away. We could never get near the Boers in that grand advance, but that did not make them believe that we could beat them. They said that we came in such force that they had to retreat before us, there was no help for it; but it was these frontal attacks that bore in upon their minds that conviction of our superiority, man to man, which will enable South Africa to have a peaceful future.

The CHAIRMAN (Admiral Sir N. Bowden-Smith, K.C.B.):—It is now my pleasant duty to return our thanks to the lecturer for the paper which we have heard this afternoon. Coming from a man who knows South Africa so well, I think you will agree with me that it is of special interest. I do not feel disposed to offer any criticisms on the opinions expressed in the paper, which refer principally to military matters, but I will offer a few remarks on two of the headings in the paper. One paragraph is headed "Special South African Difficulties." Perhaps it is rather a bold thing to speak of this in Mr. Schreiner's presence, but it appears to me that one of our chief difficulties has been that the Boers, or a great part of them, have looked upon themselves as the chosen people, and everyone else, especially the English, as outside the fold. Now people who hold those opinions are very difficult people to deal with. The late President, Mr. Kruger, a very astute and clever old man, fully understood how to take advantage of these peculiarities, and by posing as a prophet he gained an enormous influence over his burghers. I do not wish for a moment to impugn his piety or to say that he was not right according to his lights; he certainly knew the Old Testament well, but he also had a very keen perception of the value of Mauser rifles and smokeless powder. The extraordinary part of it is that even now, although a refugee in a foreign country, he still seems to exercise an enormous influence over his late subjects, whilst enjoying, it is said, the proceeds of a large fortune which he has amassed in the Transvaal. Mr. Schreiner tells us there is no cause for depression or impatience. No; we do not mean to be depressed, and we intend to possess our souls in patience. It is unfortunate that this war has partaken somewhat of the nature of a civil war; families are divided among themselves, an experience which the honourable lecturer knows as well as anyone. But these things have happened before. When we look back at past history and remember many years ago what the state of Canada was, how the feeling between the so-called French and English was as bad or worse than the feeling is now between the English and some of the Dutch in South Africa, we have reason to take courage. So let us hope, when this war is over, we may see a general shake hands all round, and the Dutch and the English loving each other better because they have fought it out. Referring to the great United States of America, North and South, after their great civil war, blended together again into one great nation; so let us trust that the South Africa of the future will, at no distant period, be one great prosperous Commonwealth, with free institutions and equal rights for all white men. I now ask you to accord a most hearty vote of thanks to the lecturer for his interesting paper.

THE SOUTH AFRICAN WAR OF 1899-1900.

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(Continued from August JOURNAL, page 984.)

PART VI.

The Kimberley Campaign.—Lord Methuen had arrived at Orange River Station on the 12th November, with the first of the troop-trains. Among the officers accompanying him was a brother of Cecil Rhodes, then shut up in Kimberley. This explains the haste with which Methuen pushed the relief expedition.

On the 21st November, when only two-thirds of his division had arrived, while his guns were only partly horsed and his supply columns absolutely non-existent, he began his advance across the Orange River. His intention was to attack the enemy (reported since the 11th to be at Belmont, about 16 miles north of the Orange River), and if he defeated him to push on in four forced marches to Kimberley. In the meantime, Commandant Cronje, who had previously been before Mafeking, had taken over command of the forces besieging Kimberley and covering the siege. Methuen found in Cronje more than his match.

After two marches Methuen arrived before the line of hills south of Belmont, whose highest point is the Kaffir Kop. On these hills, the Boers appeared to have intrenched themselves in three tiers of trenches. According to the information he had received, Methuen believed that he had Cronje's main force, some 2,500 men, before him. There were really only 500 Boers with two guns.

The Action at Belmont, 23rd November, 1899.—Early on the morning of the 23rd, Methuen deployed his whole force for the attack; that is, he did not deploy at all. The Guards advanced in dense columns, as at Belle Alliance, without skirmishers in front of them, without any preparation of the attack by fire. The 9th Brigade followed in echelon on the left,¹ the Lancers and Mounted Infantry were to turn both flanks of the enemy and throw themselves on his rear.

At 4.30 a.m. the Boers opened fire from the lowest tier of trenches on the masses of the Guards, and forced them first to take open order, and finally to lie down. In the meantime, the 9th Brigade had already taken open order, and after a short infantry fire duel had carried the weakly held position. The Guards, reinforced by the second line of the 9th Brigade, made a second attack. The Boers had galloped back and occupied the second tier of entrenchments, where they again held out.

¹ This is according to the official account of the 9th Brigade. According to Methuen's incoherent account, it would rather appear that this Brigade was in echelon on the right.

They were driven out of this by an enveloping attack in skirmishing order, but principally by the overwhelming fire of the English artillery. They held the line of heights of Kaffir's Kop for a short time and then retired, taking their wounded with them. Almost every Boer had put an Englishman out of action—some 300 killed and wounded. This was a still more bitter lesson than that of Glencoe!

There was no pursuit, although from the captured heights the Boers were seen retiring 3,000 yards away. Methuen in his report writes:—“The mounted troops were unable to carry out my orders, partly because several kopjes in front of them were held, partly because the distance was too great and the artillery were dead-beat.” He next resolved to retire on his old camp south of the Orange River, and there to await the rest of his division (the Highland Brigade) and his supply columns.

Action at Graspan (or Enslin) on 25th November, 1899.—But no later than the night of 24th November, Methuen again broke up his camp, and advanced in two columns, the 9th Brigade and the artillery in advance, the Guards and the baggage a few miles in rear. The cavalry and mounted infantry were again pushed forward on both flanks, while an armoured train reconnoitred in front. The force marched round the east of the Kaffir's Kop at Belmont, the Scots Guards being left to watch it, because the 500 Boers were supposed to be again ambushed there.¹

The armoured train reported 400 Boers and 2 guns in position at Graspan Station, near Enslin.² The first echelon was ordered to attack there. And this time, as Methuen himself says, the attack was thoroughly prepared by artillery fire, and then successfully carried out, with advanced lines of skirmishers. Only the Marine Infantry repeated the mistake of advancing in dense columns, and accordingly lost heavily (some 50 per cent.). The Guards deployed to extend the left wing, but did not come into action.

According to accounts previously published, the Scots Guards had come into action with the 500 Boers on Kaffir's Kop, who were really concealed there. But the Guards' Official Report leaves no doubt as to this point. The Guards' Brigade on that day did not fire a single cartridge or lose a single man. It seems that the Boers abandoned their obvious intention of falling upon Methuen's baggage, probably because they found it strongly guarded.

Again there was no pursuit, because this time the Lancers were “dead-beat, powerless.” This failure of the cavalry and artillery is to be explained by the exhaustion of the unacclimatised horses and the extraordinary heat of the weather.

Action at Modder River, 28th November, 1899.—Although only one battalion of the Highland Brigade had joined him, Methuen again advanced on the 26th and 27th. He proceeded, cautiously and by short marches, in a direct line to the Riet-Modder River. This caution was

¹ “So it was said,” writes Methuen in his report. It is evident that the reconnaissance by the six squadrons and the armoured train was not sufficient to establish the fact with certainty.

² There were really 2,000 Boers with 6 guns, under Major Albrecht.

necessary, not on account of the tactics of the Boers, but because Methuen had every reason to distrust the accuracy of the reports sent in by his reconnoitring parties. Another proof of this was furnished by the next encounter on the 28th. According to the reports sent in on the 27th, Methuen believed that the enemy's main body was in position at Spytfontein, 10 miles north of the Modder, and that he would be able to cross the river without encountering serious resistance; the more so as the Modder River and the Riet had been reported to him fordable at all points.¹

It was not till the 28th that he discovered that the village of Modder River, south of the railway bridge, was strongly held. He went forward with the mounted troops to reconnoitre, but could only discover the enemy east of the village. He ordered the batteries to open fire (at 5 a.m.) from a position about 1½ miles east of the railway. The Lancers and Mounted Infantry covered his right flank. Methuen still believed that he had before him only an advanced guard, which after a short fight would withdraw on the main position, which he supposed to be at Spytfontein. But, in reality, Cronje had occupied the foot of the hills with 6,000 to 7,000 men, partly Orange Boers, partly Transvaalers. The railway bridge had been blown up, and both rivers, usually insignificant, were in flood. They could only be crossed at the fords, and with difficulty even there. The Boer position was skilfully chosen. They had already discovered that only the fire of the English artillery was to be feared, as the ill-directed volleys of the infantry did no damage. They therefore laid out their trenches so as to be in dead ground, and so invisible from the position which the English artillery would naturally occupy. Where this could not be done, their trenches were so made as to be very difficult to distinguish. On this account the Boers did not hesitate to make a portion of their trenches even in front of the natural obstacle, the river.² The Boer artillery was north of both rivers.

Methuen had left behind one battalion, the Pioneers, and the débris of the detachment of Marines to protect his camp and the railway. He had attached the battalion of Highlanders to the 9th Brigade, and had ordered an advance in two columns directed on "visible objectives" named by him.

As he himself confesses, the further control of the action escaped from his hands. He admits that he was mostly to be found in places where he had no business to be (*i.e.*, in the front line); but in answer to the complaints of subordinate commanders that they received no orders, it must be pointed out that within a zone of 2,000 yards transmission of orders by mounted orderlies was rendered impossible by the precision of the Boer fire. The Guards' Brigade advanced east of the railway against the Riet branch of the river, the 9th Brigade advanced astride of the railway against the Modder River and the village on the left bank, while half a battalion bore further to the left in order to effect a turning move-

¹ "Fordable anywhere." Official Despatches, Vol. I., page 14, foot-note.

² According to this, the sketches of the entrenchments made by von Estorff and von Müller, which agree upon this point, both require correction.

ment. At 8.10 a.m. the Boers opened fire at 700 yards. Their trenches were so perfectly masked that the English had no idea where to direct their fire, and fell into the not unnatural error of rushing blindly forwards. The Orange Boers were entrenched on the bank of the river (here only twenty yards wide) opposite to the Guards. Although the Free Staters' trenches were only weakly garrisoned,¹ the Guards failed, in spite of a display of individual bravery, even to reach the river, let alone crossing it. The 9th Brigade, however, succeeded after a hard fight in carrying the village of Modder River. The small turning force had crossed the river at a hill to the westward, but were unable to advance along the right bank. At this point the battle came to a standstill. In view of the heavy losses (over 1,000 men) and the exhaustion of the troops after a ten hours' fight in abnormal heat, the forcing of the fords was no longer to be thought of. It was clearly impossible to continue the relief march before the arrival of the Highland Brigade.

Thanks to the inactivity of the Boers, the English troops were able to withdraw from the fight without difficulty and without loss. Methuen next occupied a fortified camp south of the Modder River. He calls this battle one of the hardest and severest fights in the annals of the British Army.

Cronje had withdrawn his troops in the night to the position prepared on the heights between Spytfontein and Magersfontein. He well knew that the English could not move far from the line of rails which kept them equipped for fighting, and he had prepared a carefully thought-out system of fortifications, in which he proposed to await the attacks of the relieving force and to repulse them to some purpose.

But like other Boer leaders, Cronje did not think till too late of cutting the artery which supplied the life-blood of the English forces, by the thorough destruction of the railway. When at last, on the 2nd December, the railway bridge at Graspan was blown up, it was too late. Several days before this the last troop-trains carrying the Highland Brigade had passed through, besides a full supply of food and ammunition.

Action of Magersfontein, 11th December, 1899.—On the 10th December Methuen, who had now collected the whole of his division, resolved upon a fresh attack upon Cronje. He began the action with an artillery bombardment lasting from 4.30 to 6.45 p.m., from which he expected "a demoralising effect upon the enemy's nerves." The Boers did not fire a single shot in reply to this ineffective fire; they did not wish to give away their positions. As a matter of fact, Methuen, on the evening of the 10th, was quite ignorant of the position and extent of the Boer entrenchments; in spite of his cavalry and captive balloon, he did not even know the position of the enemy's flanks. And in spite of this he resolved upon a night attack! Relying upon the estimate of Major

¹ A number of the Orange Boers could not on this day be induced to take part in the fight. This led to an exchange of very serious correspondence between the two Presidents, and to a sharply-worded warning published as an order of the day by President Steyn.

Benson, of the Artillery, he believed that his camp was $2\frac{1}{2}$ miles from the point selected for attack, namely, the Boers' left wing. This was really the centre of the Boer position. The intention was to deploy just before daybreak; till then the troops were to march in close formations. Daybreak being due at 3.25 a.m., a start was made at 12.30 a.m. The Highland Brigade marched in front in quarter column, the guides with ropes stretched between them. The Guards and the artillery followed; the whole 9th Brigade remained behind to protect the camp—another piece of tactics dating from the previous century!

A heavy thunderstorm broke as soon as the force had started. Major Benson led the column, a compass in each hand; in spite of this the direction was lost, which Methuen ascribes to the effect of the thunderstorm and of the rifles on the compass. This made it all the easier for the Boers to discover the direction in which the English were marching; rifles going off, and the "pretty clear flashes of a lantern,"¹ left them no room for doubt on this point. The whole laboriously planned scheme of the English staff fell through. To make matters worse, in consequence of the storm the day did not break till 4 a.m., instead of at 3.25, the official hour! Major Benson had once already modestly asked Major-General Wauchope, the Commander of the Highland Brigade, whether he did not think it was time to extend; but Wauchope stuck strictly to his orders, "to extend just before daybreak." The crests of the hills—upon which, according to orders, the Boers were to be found posted—were visible against the sky at some little distance, so it appeared that there was still time. There were no patrols, no scouts, not even the point of an advanced guard in front.

Suddenly a murderous fire was poured into the closed ranks of the leading battalion, the Black Watch, at a range of only 200 yards.

The natural result was a panic. No one versed in military history will cast a stone at troops overtaken by panic under circumstances such as these. On the contrary, the English officers showed admirable coolness and energy, and it was thanks to them that the panic was confined to the leading battalion, and that even here order was soon re-established. It was not till the day broke that it was apparent that the Boers had made their advanced trenches, not on the crests or the slopes of the hills, but some hundred yards out in the plain, in order to make it more difficult for the English artillery to range on them.

The Highlanders had unsuspectingly stumbled upon this advanced line. In spite of their heavy losses,² the four Scottish battalions had deployed to both flanks of the rear battalion, thrown themselves down where they stood, and were now carrying on a musketry fight at 800 yards. This fight lasted for several hours. The officers, with reckless bravery, succeeded more than once in getting their men to leave their cover and in leading them to the attack, only to be repulsed with heavy loss.

As the light improved, it was seen that the Boer position extended much further to the east than had been anticipated. It was therefore

¹ Official Despatches, Part II., page 19.

² General Wauchope, most of the officers, and 750 men had fallen.

found necessary to deploy the Brigade of Guards, and afterwards also a battalion brought up from the 9th Brigade, in order to extend the right flank. Although the right was extended as far as possible (the Guards, with their four decimated battalions, covered a front of $1\frac{3}{4}$ miles) the English did not succeed in out-flanking the Boers. This might perhaps have been possible if Methuen had adhered to elementary tactical rules, and had kept the 9th Brigade ready to hand. This sin of omission placed him in a critical position at 1 p.m., when the right wing of the Boers—quite contrary to their usual custom—left their cover and advanced. The left wing of the English had already given way—when the Boer advance stopped! If the whole Boer line had taken part in the advance a catastrophe for the English would have been inevitable. But as it was, the fight gradually died out and ceased altogether at 7.15 p.m. The English then collected their troops and retired.

If we bear in mind that the Boers with only 6,000 men held a front of 3 to 4 miles, it will not be difficult to understand why their losses were so small. They were posted so far apart, so well covered and hidden, and distributed in such an irregular fashion over the ground, that they had little to fear except from stray bullets. That they were able to repel the attempts of the English to break through this thin line is due to the fact that a single Boer rifleman—thanks to his excellent weapon and to his wonderful skill—is equal to two or three ordinary soldiers.

The fight at Magersfontein had again cost Methuen more than a thousand men. The moral effects were still more serious. Confidence in their leaders was irretrievably lost, and the last remnant of discipline had vanished. This affair sealed the fate of the relief expedition. Methuen retired to his old camp south of the Modder River, and there remained, enduring considerable privations and in a most uncomfortable situation, till Lord Roberts appeared on 10th February, 1900.

General Buller, in forwarding Methuen's report, remarks:—"I suppose that our officers will soon learn the value of reconnoitring; but so far it is only too true that our regiments rush blindly on the enemy and suffer heavy losses in consequence."¹

But how is it, we ask, that the English officers, who are not the worst educated people of the century, had not learnt the value of reconnoitring before this war broke out? How is it that they look upon a musketry action as something new and strange? Why do they neglect the most elementary rules of precaution? And the answer is: Because the English officers not only never took the trouble to study modern military history or modern tactics, but they never even troubled to read their own Drill-book.

According to the English Infantry Drill, sec. 47, para. 3, the principal maxim which should be impressed on the recruit runs as follows:—"The main points to be observed being the fullest development of firing power, the minimum of exposure to the fire of the enemy, and enough men at any point first to silence the fire of the enemy and

¹ 28th December, 1899. See Official Despatches, Part I., page 16.

then to drive him from his position." Our German Drill-book puts the same idea more plainly in Part II., para. 82 :—"The attack has only a chance of success when it succeeds in bringing about a superiority of fire. Before delivering the final assault it is, therefore, necessary to await the effect of fire."

Sec. 110 of the English Drill-book says :—"The commander of the force will base his plan of attack on the information gained by a thorough reconnaissance of the enemy's position, and the approaches to it. If it be found to offer no cover to troops attacking, he should seek to attack a flank, or to threaten the enemy's rear in preference to attacking him in front, as unless the ground offers peculiar advantages for the artillery of the offence, a direct attack across the open is costly and difficult."

Finally, sec. 124, para. 5 :—"Close formations are very vulnerable when used against troops provided with modern arms."

It is obvious that none of the senior English officers knew of these golden rules laid down in their own Drill-book. What they were all familiar with was "savage warfare," the fights against savages where a couple of volleys from the square and a shoulder to shoulder bayonet charge won an easy victory every time. The heavy losses of the English in this campaign must be ascribed, first, to their ignorance of their own drill-books, and secondly, to their obstinate adherence to the results of what they were pleased to call their experience of war.

For the rest, *Peccatur intra muros et extra!*

The Boers, by their behaviour at the Modder River and Magersfontein, disappointed every military onlooker in Europe. Here we have a force armed with an accurate long-distance rifle, and highly skilled in the use of it; a force possessing extraordinary mobility and sense of locality; and we see this force suffering an adversary, spent and exhausted by a ten hours' losing rifle-fight, to withdraw quietly, without raising a finger to stop him, and without any attempt to push the victory to the destruction of the enemy by an advance or even by a murderous fire directed on his retiring troops. And why? In this case also, through an obstinate adherence to the lessons learnt in "savage warfare," where the essence of all military art lay in economising life and valuable ammunition. This obstinacy, which defied the counsels of European officers to make any impression on it, was the real cause of the subsequent defeats of the Boers. They grudged the expenditure of life and ammunition at the wrong time, and had to pay a double and treble price when their adversary had gained strength through their remissness.

Still more ominous than the idiotic obstinacy of the Boer leaders was the first appearance of insubordination among the Orange Boers, and the discord between the allies, this evil inseparable from all coalitions. If in the days of complete and (thanks to the English) easy victory, it was possible for thousands of Boers simply to go on strike in the middle of a fight, this was an evil augury for the days of misfortune!

PART VII.

In the break-up of the division and the unsystematic distribution of the forces, it was General Gatacre who came off worst. Of his own division only one battalion and three batteries remained to him. Besides this, the following had been assigned to him: one battalion belonging to the 2nd Division (Clery, Natal), 2½ battalions of troops from the Lines of Communication, parts of French's Cavalry Division, and some detachments of military police—in all some 7,000 men.

The task assigned to him originally was to carry out, with his scratch force, the original plan of an advance on Bloemfontein. This was replaced by a more modest programme, including protection of the railways, keeping down insurrection, keeping up communication with Methuen, and checking the advance of the Free Staters who had advanced by Aliwal North, Bethulie, and Colesberg with some 6,000 men.

He handed over the task of protecting the railways and keeping up communication with Methuen to French, with his 2,000 mounted troops. This active and circumspect cavalry leader actually succeeded in capturing and holding the railway junction of Naauwpoort and Rosmead, and although he was surrounded by mobile parties of Boers he managed to escape any serious check.

Not so the unfortunate Gatacre. At the beginning of December he had assembled his small force at Queenstown. On receiving the news that strong bodies of Boers were advancing on the Stormberg passes, he resolved to cross the mountains and meet them. He entrained his infantry and artillery, cavalry and mounted infantry had to go by road, and, owing to the loss of a telegram, part of them were left behind. The objective was the railway junction Molteno, south of Stormberg, at which latter place the Boers were supposed to be.

The Action at Stormberg, 10th December, 1899.—On the 9th December Gatacre had concentrated his forces at Molteno, and intended to surprise his adversary the same night. The night march was carried out in much the same fashion as Methuen's, no reconnoitring, no advanced guard, not even a patrol thrown out.

A sergeant of the Cape Police, who was supposed to know the ground thoroughly, acted as guide. He lost his way, and led the division, of course unintentionally, into an ambushade skilfully prepared by the Boers. At 3.45 a.m. the leading battalion (the Royal Irish Rifles) received a volley at short range from the front and both flanks. It is not surprising that a panic followed, and it is to the credit of all concerned that the English officers succeeded in re-forming their men at a short distance to the rear. They got no thanks for this, however, from Lord Roberts, for in his despatches he remarks that the men were so exhausted by their long night march (only eight miles!) that they were "unable to retreat fast enough," and two half-battalions (700 men) fell into the enemy's hands. Roberts must have been all the more pleased with the way in which the rest of the force kept up the pace of the retreat, since only some thirty men actually fell from the Boer bullets.

Unfortunately the Boers, on this occasion also, did not press the pursuit, instead of profiting by the opportunity to annihilate their adversaries. It is hardly to be believed that such a mobile force allowed their defeated opponents quietly to entrain into the trucks still standing ready, at a distance of only 8 miles from the scene of their defeat, and to steam away unmolested over a mountain railway with bridges that could easily have been destroyed at every mile.

It was an undeserved piece of luck for the Boers that, in spite of their culpable lethargy, this portion of the English forces, like the others, was demoralised by this first slight encounter, and was incapable of action for weeks afterwards. And the Boers are still more to blame for standing idle and looking on, while their beaten opponents recovered themselves and regained strength.

PART VIII.

The Siege of Ladysmith and Buller's Attempts to Relieve it before Lord Roberts' Intervention.—As already related, the Boers had completely surrounded Ladysmith by the 29th October, 1899, and after repelling White's three attempts to break out on the 30th October and the 2nd and 3rd November, they proceeded to a regular siege. The five heavy guns (5-inch) brought from the Pretoria forts, besides fifteen field guns, were placed in position on the hills surrounding the town. On the 7th November a bombardment of the town from all sides was commenced, with the effect that the English troops left the town and selected a sheltered camping ground outside to the north-west. They were afterwards again obliged to shift to Cæsar's Camp, south of the town. Joubert allowed the inhabitants incapable of bearing arms to pitch a separate camp, which was spared when bombarding or attacking the entrenchments.

The small town of Ladysmith (4,500 inhabitants) lies on the left bank of the Klip River in a saucer-shaped hollow, surrounded by a double ring of kopjes and ranges of hillocks. Only to the south-east were low-lying flats, through which the Klip River had cut a deep narrow channel.

The English had entrenched themselves and placed their guns in position on the inner ring of heights, which is everywhere overlooked and commanded by the outer ring. Their lines were about $12\frac{1}{2}$ miles in circumference. White had five heavy guns and forty field guns, and had thus a decided superiority in artillery. On this account Joubert considered it impossible to reduce the place by bombardment or by assault, although only provisionally fortified. In opposition to the counsel of his European advisers, he allowed his weak force of artillery to be scattered round the whole circle of 30 miles, instead of collecting it into one group and bringing it suddenly to bear upon the face chosen for attack.

Thus it came about that the various attacks made by weak detachments on the English works were repulsed, and that the English

succeeded, in two night sorties, in disabling three of the Boers' precious heavy guns.

In the meantime, Buller's relief force was engaged in its advance from Durban. The leading echelons were on the 20th November at Estcourt (General Hildyard), at Mooi River (General Barton), and about Pietermaritzburg. About the same time Joubert had wisely decided to fall upon and surprise these leading isolated detachments. Leaving behind only the minimum number of troops required to sustain the blockade, he had advanced in three columns to the south. A few days later, after slight encounter at Chieveley and Willow Grange, and afterwards at Mooi River, he had surrounded the leading English detachments at Estcourt and Mooi River, and had blown up the railway bridge at Colenso. On the 22nd November Joubert, with his main body (some 17,000 men), was a short day's march to the north of Pietermaritzburg.

If at this time the Boers had attacked boldly, the portions of Buller's force which had then reached Pietermaritzburg would certainly have been driven back on Durban, and the relief expedition would have come to an end at the coast.

Then a Boer "council of war" came to the assistance of the English. According to accredited accounts the two Presidents and the council decided to abandon the "dangerous offensive," to withdraw behind the Tugela, and to entrench themselves at Colenso. In this way they would be able to fight in the manner best suited to the Boers, that is, purely on the defensive, and effectively to stop Buller's advance.

The Boer retreat began on the 26th November, and by the end of the month Barton's and Hildyard's detachments, which had been surrounded, were set free without any effort on their own part; and Buller breathed more freely.

In the last week of November and the first week of December Buller's corps was able to concentrate without opposition at Estcourt. The composition of his force is shown in the attached table.¹

On the 5th December Buller advanced with his main body to Frere, a station half-way between Estcourt and Colenso. His advance guard was at Chieveley, six miles south of the Tugela. This brought the leading English troops within a day's march of Ladysmith, so that they were able to open heliographic² communication with the besieged. Henceforward it was possible to execute concerted movements with the relieving and besieged forces.

¹ Nominally, General Clery was in command of the relief expedition, since Buller was Commander-in-Chief, South Africa; but actually Buller himself took command of the relief expedition.

² The heliograph with 44-inch mirror carries to 30 miles, and with 11-inch mirror to 80 miles. At night the calcium light, carrying to 18 miles, is used. The alphabet is the Morse, the long and short flashes being formed by movable shutters.

COMPOSITION OF THE SOUTH NATAL FIELD FORCES.¹—(Lady Smith Relief Force.)

Actual Commander—General Buller. Nominally in command—General CLERY.

| 5th Division (Warren), ² | | 3rd Division (no commander), ³ | | | 2nd Division (Clery). | |
|--|--|---|---|---|---|--|
| 11th Brigade (Woodgate), | 10th Brigade (Coke), | 6th Brigade (Barton), | 5th Brigade (Hart), | 4th Brigade (Lyttelton), ⁴ | 2nd Brigade (Hildyard), | |
| <input type="checkbox"/> 1st S. Lancashire, | <input type="checkbox"/> 2nd Middlesex, | <input type="checkbox"/> 2nd R. Scots Fus., | <input type="checkbox"/> 1st Connaught R., | <input type="checkbox"/> 3rd King's R.R., | <input type="checkbox"/> 2nd Devonshire, | |
| <input type="checkbox"/> 1st York & Lancster, | <input type="checkbox"/> 2nd Dorsets, | <input type="checkbox"/> 2nd R. Fusiliers, | <input type="checkbox"/> 1st Inniskilling F., | <input type="checkbox"/> 2nd Scottish Rifles (Cameronians), | <input type="checkbox"/> 2nd R. W. Surrey, | |
| <input type="checkbox"/> 2nd R. Lancaster, | <input type="checkbox"/> 2nd Warwicks, | <input type="checkbox"/> 2nd R. Irish Fus., | <input type="checkbox"/> 2nd Border Regt., | <input type="checkbox"/> 1st Rifle Brigade, | <input type="checkbox"/> 2nd East Surrey, | |
| <input type="checkbox"/> 2nd Lancashire Fus., | <input type="checkbox"/> 1st Yorks, | <input type="checkbox"/> 1st R. Welsh Fus., | <input type="checkbox"/> 1st R. Dublin Fus., | <input type="checkbox"/> 1st Durham L.I., | <input type="checkbox"/> 2nd W. Yorkshire, | |
| <i>Mounted Troops.</i> | | | | | | |
| <input type="checkbox"/> 1st Thorneycroft's M.L. | <input type="checkbox"/> 2nd S. African Light Horse, | <input type="checkbox"/> 3rd Natal Carabineers, | <input type="checkbox"/> 4th King's R.R. M.L. | <input type="checkbox"/> 5th R. Dublin Fus. M.L. | <input type="checkbox"/> 6th 14th Lancers, ² | <input type="checkbox"/> 7th 13th Hussars, |
| <input type="checkbox"/> 8th Imperial Light Horse, | <input type="checkbox"/> 9th Bethune's M.L. | <input type="checkbox"/> 10th Natal Carabineers, | <input type="checkbox"/> 11th King's R.R. M.L. | <input type="checkbox"/> 12th R. Dublin Fus. M.L. | <input type="checkbox"/> 13th 14th Lancers, ² | <input type="checkbox"/> 14th 13th Hussars, |
| <input type="checkbox"/> 15th Thorneycroft's M.L. | <input type="checkbox"/> 16th S. African Light Horse, | <input type="checkbox"/> 17th Natal Carabineers, | <input type="checkbox"/> 18th King's R.R. M.L. | <input type="checkbox"/> 19th R. Dublin Fus. M.L. | <input type="checkbox"/> 20th 14th Lancers, ² | <input type="checkbox"/> 21st 13th Hussars, |
| <input type="checkbox"/> 22nd Thorneycroft's M.L. | <input type="checkbox"/> 23rd S. African Light Horse, | <input type="checkbox"/> 24th Natal Carabineers, | <input type="checkbox"/> 25th King's R.R. M.L. | <input type="checkbox"/> 26th R. Dublin Fus. M.L. | <input type="checkbox"/> 27th 14th Lancers, ² | <input type="checkbox"/> 28th 13th Hussars, |
| <input type="checkbox"/> 29th Thorneycroft's M.L. | <input type="checkbox"/> 30th S. African Light Horse, | <input type="checkbox"/> 31st Natal Carabineers, | <input type="checkbox"/> 32nd King's R.R. M.L. | <input type="checkbox"/> 33rd R. Dublin Fus. M.L. | <input type="checkbox"/> 34th 14th Lancers, ² | <input type="checkbox"/> 35th 13th Hussars, |
| <input type="checkbox"/> 36th Thorneycroft's M.L. | <input type="checkbox"/> 37th S. African Light Horse, | <input type="checkbox"/> 38th Natal Carabineers, | <input type="checkbox"/> 39th King's R.R. M.L. | <input type="checkbox"/> 40th R. Dublin Fus. M.L. | <input type="checkbox"/> 41th 14th Lancers, ² | <input type="checkbox"/> 42th 13th Hussars, |
| <input type="checkbox"/> 43rd Thorneycroft's M.L. | <input type="checkbox"/> 44th S. African Light Horse, | <input type="checkbox"/> 45th Natal Carabineers, | <input type="checkbox"/> 46th King's R.R. M.L. | <input type="checkbox"/> 47th R. Dublin Fus. M.L. | <input type="checkbox"/> 48th 14th Lancers, ² | <input type="checkbox"/> 49th 13th Hussars, |
| <input type="checkbox"/> 50th Thorneycroft's M.L. | <input type="checkbox"/> 51st S. African Light Horse, | <input type="checkbox"/> 52nd Natal Carabineers, | <input type="checkbox"/> 53rd King's R.R. M.L. | <input type="checkbox"/> 54th R. Dublin Fus. M.L. | <input type="checkbox"/> 55th 14th Lancers, ² | <input type="checkbox"/> 56th 13th Hussars, |
| <input type="checkbox"/> 57th Thorneycroft's M.L. | <input type="checkbox"/> 58th S. African Light Horse, | <input type="checkbox"/> 59th Natal Carabineers, | <input type="checkbox"/> 60th King's R.R. M.L. | <input type="checkbox"/> 61th R. Dublin Fus. M.L. | <input type="checkbox"/> 62th 14th Lancers, ² | <input type="checkbox"/> 63th 13th Hussars, |
| <input type="checkbox"/> 64th Thorneycroft's M.L. | <input type="checkbox"/> 65th S. African Light Horse, | <input type="checkbox"/> 66th Natal Carabineers, | <input type="checkbox"/> 67th King's R.R. M.L. | <input type="checkbox"/> 68th R. Dublin Fus. M.L. | <input type="checkbox"/> 69th 14th Lancers, ² | <input type="checkbox"/> 70th 13th Hussars, |
| <input type="checkbox"/> 71st Thorneycroft's M.L. | <input type="checkbox"/> 72nd S. African Light Horse, | <input type="checkbox"/> 73rd Natal Carabineers, | <input type="checkbox"/> 74th King's R.R. M.L. | <input type="checkbox"/> 75th R. Dublin Fus. M.L. | <input type="checkbox"/> 76th 14th Lancers, ² | <input type="checkbox"/> 77th 13th Hussars, |
| <input type="checkbox"/> 78th Thorneycroft's M.L. | <input type="checkbox"/> 79th S. African Light Horse, | <input type="checkbox"/> 80th Natal Carabineers, | <input type="checkbox"/> 81th King's R.R. M.L. | <input type="checkbox"/> 82th R. Dublin Fus. M.L. | <input type="checkbox"/> 83th 14th Lancers, ² | <input type="checkbox"/> 84th 13th Hussars, |
| <input type="checkbox"/> 85th Thorneycroft's M.L. | <input type="checkbox"/> 86th S. African Light Horse, | <input type="checkbox"/> 87th Natal Carabineers, | <input type="checkbox"/> 88th King's R.R. M.L. | <input type="checkbox"/> 89th R. Dublin Fus. M.L. | <input type="checkbox"/> 90th 14th Lancers, ² | <input type="checkbox"/> 91th 13th Hussars, |
| <input type="checkbox"/> 92nd Thorneycroft's M.L. | <input type="checkbox"/> 93rd S. African Light Horse, | <input type="checkbox"/> 94th Natal Carabineers, | <input type="checkbox"/> 95th King's R.R. M.L. | <input type="checkbox"/> 96th R. Dublin Fus. M.L. | <input type="checkbox"/> 97th 14th Lancers, ² | <input type="checkbox"/> 98th 13th Hussars, |
| <input type="checkbox"/> 99th Thorneycroft's M.L. | <input type="checkbox"/> 100th S. African Light Horse, | <input type="checkbox"/> 101st Natal Carabineers, | <input type="checkbox"/> 102nd King's R.R. M.L. | <input type="checkbox"/> 103rd R. Dublin Fus. M.L. | <input type="checkbox"/> 104th 14th Lancers, ² | <input type="checkbox"/> 105th 13th Hussars, |
| <input type="checkbox"/> 106th Thorneycroft's M.L. | <input type="checkbox"/> 107th S. African Light Horse, | <input type="checkbox"/> 108th Natal Carabineers, | <input type="checkbox"/> 109th King's R.R. M.L. | <input type="checkbox"/> 110th R. Dublin Fus. M.L. | <input type="checkbox"/> 111th 14th Lancers, ² | <input type="checkbox"/> 112th 13th Hussars, |
| <input type="checkbox"/> 113th Thorneycroft's M.L. | <input type="checkbox"/> 114th S. African Light Horse, | <input type="checkbox"/> 115th Natal Carabineers, | <input type="checkbox"/> 116th King's R.R. M.L. | <input type="checkbox"/> 117th R. Dublin Fus. M.L. | <input type="checkbox"/> 118th 14th Lancers, ² | <input type="checkbox"/> 119th 13th Hussars, |
| <input type="checkbox"/> 120th Thorneycroft's M.L. | <input type="checkbox"/> 121st S. African Light Horse, | <input type="checkbox"/> 122nd Natal Carabineers, | <input type="checkbox"/> 123rd King's R.R. M.L. | <input type="checkbox"/> 124th R. Dublin Fus. M.L. | <input type="checkbox"/> 125th 14th Lancers, ² | <input type="checkbox"/> 126th 13th Hussars, |
| <input type="checkbox"/> 127th Thorneycroft's M.L. | <input type="checkbox"/> 128th S. African Light Horse, | <input type="checkbox"/> 129th Natal Carabineers, | <input type="checkbox"/> 130th King's R.R. M.L. | <input type="checkbox"/> 131th R. Dublin Fus. M.L. | <input type="checkbox"/> 132th 14th Lancers, ² | <input type="checkbox"/> 133th 13th Hussars, |
| <input type="checkbox"/> 134th Thorneycroft's M.L. | <input type="checkbox"/> 135th S. African Light Horse, | <input type="checkbox"/> 136th Natal Carabineers, | <input type="checkbox"/> 137th King's R.R. M.L. | <input type="checkbox"/> 138th R. Dublin Fus. M.L. | <input type="checkbox"/> 139th 14th Lancers, ² | <input type="checkbox"/> 140th 13th Hussars, |
| <input type="checkbox"/> 141st Thorneycroft's M.L. | <input type="checkbox"/> 142nd S. African Light Horse, | <input type="checkbox"/> 143rd Natal Carabineers, | <input type="checkbox"/> 144th King's R.R. M.L. | <input type="checkbox"/> 145th R. Dublin Fus. M.L. | <input type="checkbox"/> 146th 14th Lancers, ² | <input type="checkbox"/> 147th 13th Hussars, |
| <input type="checkbox"/> 148th Thorneycroft's M.L. | <input type="checkbox"/> 149th S. African Light Horse, | <input type="checkbox"/> 150th Natal Carabineers, | <input type="checkbox"/> 151th King's R.R. M.L. | <input type="checkbox"/> 152th R. Dublin Fus. M.L. | <input type="checkbox"/> 153th 14th Lancers, ² | <input type="checkbox"/> 154th 13th Hussars, |
| <input type="checkbox"/> 155th Thorneycroft's M.L. | <input type="checkbox"/> 156th S. African Light Horse, | <input type="checkbox"/> 157th Natal Carabineers, | <input type="checkbox"/> 158th King's R.R. M.L. | <input type="checkbox"/> 159th R. Dublin Fus. M.L. | <input type="checkbox"/> 160th 14th Lancers, ² | <input type="checkbox"/> 161th 13th Hussars, |
| <input type="checkbox"/> 162nd Thorneycroft's M.L. | <input type="checkbox"/> 163rd S. African Light Horse, | <input type="checkbox"/> 164th Natal Carabineers, | <input type="checkbox"/> 165th King's R.R. M.L. | <input type="checkbox"/> 166th R. Dublin Fus. M.L. | <input type="checkbox"/> 167th 14th Lancers, ² | <input type="checkbox"/> 168th 13th Hussars, |
| <input type="checkbox"/> 169th Thorneycroft's M.L. | <input type="checkbox"/> 170th S. African Light Horse, | <input type="checkbox"/> 171st Natal Carabineers, | <input type="checkbox"/> 172nd King's R.R. M.L. | <input type="checkbox"/> 173rd R. Dublin Fus. M.L. | <input type="checkbox"/> 174th 14th Lancers, ² | <input type="checkbox"/> 175th 13th Hussars, |
| <input type="checkbox"/> 176th Thorneycroft's M.L. | <input type="checkbox"/> 177th S. African Light Horse, | <input type="checkbox"/> 178th Natal Carabineers, | <input type="checkbox"/> 179th King's R.R. M.L. | <input type="checkbox"/> 180th R. Dublin Fus. M.L. | <input type="checkbox"/> 181th 14th Lancers, ² | <input type="checkbox"/> 182th 13th Hussars, |
| <input type="checkbox"/> 183rd Thorneycroft's M.L. | <input type="checkbox"/> 184th S. African Light Horse, | <input type="checkbox"/> 185th Natal Carabineers, | <input type="checkbox"/> 186th King's R.R. M.L. | <input type="checkbox"/> 187th R. Dublin Fus. M.L. | <input type="checkbox"/> 188th 14th Lancers, ² | <input type="checkbox"/> 189th 13th Hussars, |
| <input type="checkbox"/> 190th Thorneycroft's M.L. | <input type="checkbox"/> 191st S. African Light Horse, | <input type="checkbox"/> 192nd Natal Carabineers, | <input type="checkbox"/> 193rd King's R.R. M.L. | <input type="checkbox"/> 194th R. Dublin Fus. M.L. | <input type="checkbox"/> 195th 14th Lancers, ² | <input type="checkbox"/> 196th 13th Hussars, |
| <input type="checkbox"/> 197th Thorneycroft's M.L. | <input type="checkbox"/> 198th S. African Light Horse, | <input type="checkbox"/> 199th Natal Carabineers, | <input type="checkbox"/> 200th King's R.R. M.L. | <input type="checkbox"/> 201st R. Dublin Fus. M.L. | <input type="checkbox"/> 202nd 14th Lancers, ² | <input type="checkbox"/> 203rd 13th Hussars, |
| <input type="checkbox"/> 204th Thorneycroft's M.L. | <input type="checkbox"/> 205th S. African Light Horse, | <input type="checkbox"/> 206th Natal Carabineers, | <input type="checkbox"/> 207th King's R.R. M.L. | <input type="checkbox"/> 208th R. Dublin Fus. M.L. | <input type="checkbox"/> 209th 14th Lancers, ² | <input type="checkbox"/> 210th 13th Hussars, |
| <input type="checkbox"/> 211th Thorneycroft's M.L. | <input type="checkbox"/> 212th S. African Light Horse, | <input type="checkbox"/> 213th Natal Carabineers, | <input type="checkbox"/> 214th King's R.R. M.L. | <input type="checkbox"/> 215th R. Dublin Fus. M.L. | <input type="checkbox"/> 216th 14th Lancers, ² | <input type="checkbox"/> 217th 13th Hussars, |
| <input type="checkbox"/> 218th Thorneycroft's M.L. | <input type="checkbox"/> 219th S. African Light Horse, | <input type="checkbox"/> 220th Natal Carabineers, | <input type="checkbox"/> 221st King's R.R. M.L. | <input type="checkbox"/> 222nd R. Dublin Fus. M.L. | <input type="checkbox"/> 223rd 14th Lancers, ² | <input type="checkbox"/> 224th 13th Hussars, |
| <input type="checkbox"/> 225th Thorneycroft's M.L. | <input type="checkbox"/> 226th S. African Light Horse, | <input type="checkbox"/> 227th Natal Carabineers, | <input type="checkbox"/> 228th King's R.R. M.L. | <input type="checkbox"/> 229th R. Dublin Fus. M.L. | <input type="checkbox"/> 230th 14th Lancers, ² | <input type="checkbox"/> 231th 13th Hussars, |
| <input type="checkbox"/> 232nd Thorneycroft's M.L. | <input type="checkbox"/> 233rd S. African Light Horse, | <input type="checkbox"/> 234th Natal Carabineers, | <input type="checkbox"/> 235th King's R.R. M.L. | <input type="checkbox"/> 236th R. Dublin Fus. M.L. | <input type="checkbox"/> 237th 14th Lancers, ² | <input type="checkbox"/> 238th 13th Hussars, |
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Buller was accordingly soon fully informed of the state of affairs¹ in Ladysmith, but learnt very little about the position and extent of the Boer entrenchments at Colenso, or about the distribution of their forces. Reconnaissance by cavalry, by balloon, and by spies here completely failed.

No one will wonder that in a difficult mountain country, with few roads, opposed to natural fortresses as strong as Spion Kop, and with an obstacle in front like the Tugela, the cavalry were unable to do much.

The balloon (especially the spherical balloon) is, like the bicycle, a fine-weather instrument. No adversary provided with modern fire-arms would allow an ascent to be made so close as to allow reconnaissance with the naked eye; it is necessary to have recourse to observation by telescope, the accuracy of which is very doubtful. No balloon, not even the improved kite balloon, is so steady as to allow the telescope to be focussed on any one point long enough to observe accurately the nature of the object in the field; a spinning, swaying, or up-and-down motion of a few feet is sufficient to throw an object a couple of miles distant hundreds of yards out of the field. A smart observer will soon pick up his object again. But this annoyance is so constant, and so trying to the nerves, that in effect it is only possible to distinguish with certainty large objects, such as masses of troops in close formation, long columns marked by a cloud of dust, and camping grounds marked by smoke or bivouac fires. Well-concealed field works, lines of outposts and such like, can never be made out with certainty. Accordingly, in the English official accounts there is nowhere any mention of important information obtained by balloon.²

Contrary to expectation, reconnoitring by spies failed also, although in Natal, unlike Cape Colony, the English element predominated. It seems as if the Boers' successful début had generally intimidated the inhabitants.

In any case, nothing should have been left untried on the side of the English to carry out an effective reconnaissance, before attacking so dangerous an adversary in a position strong by nature and strengthened by art.

The English had the means of reconnoitring at hand, namely ten companies of mounted infantry, of which five were from the Colony, and four battalions of rifles and light infantry. I consider that with these troops it would have been quite possible to carry out a system of "mixed reconnaissance." My idea of such a system is as follows:—

The 4th Brigade (Light Infantry and Rifles) to push its advanced posts up to within three miles of the enemy's supposed position. The five

¹ The news was relatively good; the energetic White had his command well in hand; and in spite of some privations which had to be endured, the health of the garrison at that time gave no cause for anxiety. In the *moral* of the troops there was even a certain degree of exaltation apparent, due to the near approach of the relieving force, which showed itself in the successful sorties already mentioned.

² With the exception of the balloon report which explained the mysterious disappearance of Cronje's forces into pits in the ground at Wolvekraal Drift. This will be referred to later.

English companies of mounted infantry to post themselves as stations for collecting reports, the five Colonial companies to go forward as reconnoitring squadrons in advance of the "safety line" and to feel the whole position with patrols and single scouts. That is, they would advance by dashes from point of observation to point of observation till they were fired on. In this way, by repeated touching and elastic rebounding, they must necessarily in the end determine the whole line of the enemy's front and the pivots of his flanks, even at the sacrifice of a few dozen riders. Now would begin the work of the light infantry. Infantry patrols, led by dismounted men of mounted infantry, must creep by night between the Boer posts or round the flanks, to fix the position of the batteries and groups of field works, and discover whether any obstacles to the advance exist. Naturally one or more of these patrols would sometimes fail to return, and this contingency would have to be reckoned with. Such small losses are of no account when providing against the loss of masses of men.

I have introduced these reflections here, because they define the point of view from which the English preliminary tactics and troop-leading in the Tugela battles must be judged.

On the 12th December Buller had closed up the whole of his troops on his advanced guard at Chieveley.

Buller's information about the Boer position on the Tugela rested partly on supposition, partly on incorrect information. Entrenchments had been made out by telescope on the kopjes to the north and east of the river, these were supposed to be the Boer position. On the 13th and 14th December these entrenchments were bombarded, with a great expenditure of ammunition, by heavy naval guns. The fire was accurate, but in no way dangerous to the Boers. As a matter of fact, the so-called entrenchments were really the bridge-head works thrown up by White's troops on the line of communication in October previous. The Boers during the bombardment lay safe and undisturbed in their shelter trenches, further south towards the river. These trenches, of strong profile, had been pushed forward, in some cases to the south bank. They were combined in masterly fashion with the ground about them, masked with bushes and guarded by wire entanglements.

Buller, in his despatch¹ of 17th December, 1899, thus describes the battle-field (a sketch which accompanied the despatch has unfortunately not been reproduced):—

"The Colenso bridge² is the centre of a semicircle surrounded by hills, whose crests, about 1,400 feet high, command it at a distance of some $4\frac{1}{2}$ miles. Near the bridge are four small steep-sided hog-backed hills, the higher and longer ones being the furthest from the river. The first of these hills, known as Fort Wylie, was very strongly entrenched with well-built dry-stone walls along the heights, in some places there was a triple row of these entrenchments. It was a formidable position to

¹ *Vide Official Despatches, Part I., page 11.*

² Like the railway bridge, this iron road-bridge had been blown up by the Boers.

attack, but I thought that if I could once establish myself in the dead angle under Fort Wylie, the rest of the hills would to a great extent mask one another's fire."

These were the supposed Boer positions on which the shells of the naval guns had been wasted. Buller was ignorant of the fact that the real Boer positions lay to the south, west, and east of these hills. His orders issued before the battle were therefore based upon entirely erroneous information. These orders were drawn up by General Clery under Buller's instructions ("issued by my direction," says Buller), and in their outward form they resemble a German set of orders for the conduct of operations (*Operationsbefehl*). In places, however, the general scheme of the orders breaks down, and both the form and the matter show a tendency to imitate the old-fashioned Austrian School. As an example of many orders, these may here be transcribed literally.¹

"Chieveley,

"14th December, 1899, 10 p.m.

"1. The enemy is entrenched on the kopjes north of Colenso Bridge. A large camp is reported near the Ladysmith road, about 5 miles north-west of Colenso. Another large camp is reported on the hills north of the Tugela, and due north of Hlangwane Hill.

"2. The intention of the General Officer Commanding is to force the passage of the Tugela to-morrow.

"3. The 5th Brigade will start from its present camp at 4.30 a.m. and march on Bridle Drift, which lies to the west of and close to the confluence of Dorn Kop Spruit and the Tugela. The brigade will cross at this point, and after crossing will advance along the left bank of the river against the kopjes north of the iron bridge.

"4. The 2nd Brigade will start from its present camp at 4 a.m., and will move south of the present camps of Nos. 1 and 2 Brigades, Divisional Artillery, on the iron bridge at Colenso. The brigade will cross at this point and occupy the kopjes north of the iron bridge.

"5. The 4th Brigade will advance at 4.30 a.m. on a point between Bridle Drift and the railway, so that it can support either the 5th or the 2nd Division.

"6. The 6th Brigade (less half-battalion baggage-guard) will advance at 4 a.m. to the east of the railway towards Hlangwane Hill, and will take up a position from which it can cover the right flank of the 2nd Brigade, and, if necessary, support either the 2nd Brigade or the mounted troops which (as afterwards explained) will advance on Hlangwane Hill.

"7. The officer commanding Mounted Brigade will move off at 4 a.m. with a force of 1,000 men and 1 battery of the 1st Division in the direction of Hlangwane Hill; he will cover the right flank of the whole advance, and endeavour to occupy a position on Hlangwane Hill, from which he can take the kopjes north of the iron bridge in flank. Besides

¹ *Vide* Official Despatches, Part I., page 13.

the above, he will detail two detachments of 300 and 500 men respectively to cover the right and left flanks, and also to protect the baggage.¹

"8. The 2nd Division Field Artillery will move off at 4.30 a.m., will follow the 4th Brigade, and will take up a position from which it can take the kopjes north of the iron bridge in flank. This division is assigned to General Hart's command.

"The six naval guns (two 4.7's and four 12-pounders) now in position to the north of the 4th Brigade will advance on the right of the 2nd Division Field Artillery.

"The 1st Division Field Artillery (less 1 battery, detached for duty with the Mounted Brigade) will advance at 3.30 a.m. to the north of the railway, and covered by the 6th Brigade, will move to a point from which it can prepare the crossing of the 2nd Brigade.

"The six naval guns now encamped with the 2nd Division Field Artillery will accompany the 1st Division Field Artillery, and act with it.

"9. As soon as the troops detailed in the foregoing orders have moved off, the remaining units and the baggage will form up in column facing north in five lines, and will park in rear of the present artillery camp. The right of each line will rest upon the railway; but a gap of 100 yards is to be left between the right of the line and the railway. (Here follows the detail of the individual ammunition columns, field hospitals, baggage, and commissariat columns.)

"10. The Commander-in-Chief will be found near the 4.7 guns.

"The officer commanding Pioneers will detail 2 sections of the 17th Pioneer Company to accompany the 5th Brigade, and 1 section and Staff to accompany the 2nd Brigade.

"11. Every man of the infantry will carry 150 rounds pouch ammunition, after the ammunition carried in the bullock wagons with the regimental baggage has been distributed. Infantry greatcoats can at the discretion of brigade commanders be carried on two bullock wagons with the baggage of each regiment. No other supplies are to be loaded in these wagons.

"12. The officer commanding 6th Brigade will detail half a battalion as baggage guard. The two naval guns now in position close behind the Divisional Staff Quarters will move forward at 5 a.m. to the position now occupied by the 4.7 guns."²

From the text of Orders 1—8 we may infer that Buller believed that only the centre column of the five would encounter an adversary—

¹ See General Orders No. 12.

² It is quite pitiable to see how Buller goes out of his way to make the issue of orders as difficult as possible. His corps was organised in three divisions; yet he not only addresses his orders to each brigade individually, but even to the field artillery divisions and to the single groups of naval guns. He even concerns himself especially with the position of the parks of the different ammunition columns and commissariat and baggage trains. We often see heterogeneous matters included in one order; thus at Order No. 12 it suddenly occurred to the officer drawing up the orders that he had forgotten the two naval guns, so he straightway included them in the order about the baggage. Even in the science of issuing orders the English General Staff had much to learn.

the adversary whom he supposed to be on the four ridges, north of Colenso Bridge, and to be already much shaken by his bombardment, to which not a shot had been returned. As a matter of fact, Schalk Burger, who commanded *vice* Joubert (on the sick list), had literally entrenched (*eingegraben*) his 17,000 men on a front of about six miles. He had provided in exemplary fashion for rapid movements of troops and artillery behind this long front; even field railways were in operation. The result was that each of the five attacking columns encountered an adversary, and even the centre column met the enemy at a point where it did not expect him. Under the decimating fire to which they were subjected, each column believed that it was opposed to the main body of the enemy, or at any rate to a very superior force. Exactly the same thing had happened at Modder River and Magersfontein.

Buller's idea was, as he writes himself, to cross first at the western ford, Bridle Drift; the troops which had crossed here were to wheel to the right and make a flank attack to facilitate the crossing of the centre column. The idea was sound; not so the manner in which it was carried out.

In the first place, the thirty minutes' start allowed to this outflanking force was very short measure. Two hours would hardly have sufficed. In the next place, the centre column should have been ordered to carry out a delaying action until the effect of the flank attack began to make itself felt.

So much for the mistake of the general. Now for the mistakes of the subordinate commanders. *Bridle Drift* was not found, simply because it did not exist. The Boers had dammed the Tugela, already in flood, and raised the level of the waters.

Once again, there was no reconnoitring, no officers' patrols, not even the point of an advanced guard!

Hart's brigade, hunting for the lost ford, wandered to the eastwards over Dorn Kop Spruit, although the orders distinctly said that the ford was to the west of the mouth of the spruit.¹ In the direction that the brigade now took, the Tugela makes a pear-shaped loop to the north. Buller, who saw the dangerous direction in which the brigade was now marching, attempted to recall Hart, but too late; the trap was already sprung. From three sides the Boer bullets hailed upon the columns, which were unavoidably massed together.

To make matters worse, Buller threw two more battalions from Lyttelton's brigade (2nd Column) into this *inferno*.

In the meantime, fighting had also begun in the centre. At 6 a.m. the naval guns had recommenced their target practice against the old empty trenches, without eliciting any reply from the Boers. Hildyard's brigade deployed for the attack. The 1st Division F.A. had to take up a position to the east of the railway, and prepare the crossing of Hildyard's brigade. It drove straight ahead through the infantry,² without scouts or

¹ Cf. G.O. No. 3 ante.

² The General Orders were here again in fault. The 1st Division F.A. was ordered to start at 3.30 a.m., the 6th Brigade, which was to escort it, not till 4 a.m.

combat patrols, and suddenly came under a murderous infantry fire at 300 yards, which in a short time disabled the whole of the detachments and teams. No one on the side of the English had any idea that at this point the Boer trenches were south of the river.

At the same time (6.25 a.m.) the Boer artillery¹ and the Boer riflemen on both sides of the railway had opened fire, the latter firing at from 800 to 1,000 yards. The English advance came to a standstill; two of Hildyard's battalions tried to cut out the lost guns, and the left column of Barton's brigade also joined in the fight, but in vain. The rest of Barton's brigade had attached itself to the right column, which was carrying on an ineffective fight with the Boer left wing, posted on Hlangwane Hill.

In the meantime, the centre had been reinforced on the right by the last remaining battalions of Lyttelton's brigade (the 4th). At the same time they got the order "not to become too hotly engaged."

Thus Buller had succeeded in distributing his last remaining troops along the line, without even attempting to achieve a superiority at any one point, much less succeeding. All the units had been thoroughly broken up and mixed, all the men thoroughly exhausted from the fearful heat and want of water, the whole affair a hopeless muddle. The fight dragged on for eight hours in this manner, the English losing heavily, although they withdrew to the respectful distance of 800 to 1,000 yards. At this distance the Boer lines were hardly visible, "the men did not know where to aim," and, considering the very poor shooting of the English soldier, it is to be presumed that they did not hit anything. On the other hand, the Boer bullets pitched with deadly certainty into the English ranks; on this occasion the Boer artillery fire was almost as good as their rifle fire. Even the bullock teams of the naval guns, which was firing from a great distance, were struck by shell and bolted, so that the guns had to be laboriously hauled out of action by hand.

In this hopeless state of affairs, Buller at 2 p.m. gave the order to retreat. Here, again, the Boers built a golden bridge for the flying enemy, and merely sent a few shots after the retreating columns. Part of Hildyard's brigade, however (the 2nd Devons), had not received the order to retreat, and remained by itself in front of the line; this was too much for the Boers, and they dashed forward and captured this battalion.

The day's fighting had cost the English nearly 1,200 men and 11 guns, whereas the Boers had hardly lost 100 men.

Buller again collected his troops in the camps at Chieveley and Frere.

Thus the English forces had been disabled at all the three theatres of the war. Although no decisive battle had been fought, although the Boers were too phlegmatic to turn their easy successes into crushing victories, and although the English losses were not so heavy as

¹ Major Albrecht had arrived in the nick of time with two Q.F. batteries, which had taken part in the action at Modder River and been transferred next day to the eastern theatre of war.

absolutely to prevent their resuming the offensive; yet the English had lost more than appeared on the surface. They had lost the impulse that drives the masses forward—moral self-reliance, confidence in their leaders, in the luck of their own side. Even the regimental officers, who had exposed themselves with reckless bravery in order to encourage their men, were no longer respected by the troops. The three English army-corps in the field had lost almost every vestige of manhood and self-respect. The three English generals—Gatacre, Methuen, and Buller—were constrained by circumstances to remain absolutely inactive till further orders.

But the English War Office went to work energetically. Order after order was issued, summoning the whole armed strength of England and mobilising a number of Volunteers. Two men were ordered out whose names were in popular estimation associated with success and invincibility, namely, Lord Roberts, who had already in 1879-80 brought an unfortunate campaign to a successful issue, and Lord Kitchener, the conqueror of the Soudan, the latest popular hero.¹

Relying on her predominant sea-power, and not less on the love of peace of Continental nations, England sent out even a large portion of her 3rd Army Corps,² intended only for home defence. There remained in England only a skeleton force of fourteen battalions, twelve cavalry regiments, and sixteen battalions of Regular troops.³

And the nation did more than this. A number of Militia battalions, some 30 in all, volunteered to give up their privileges and allow themselves to be employed out of the country. The national movement seemed at times to approach the point of general conscription. Strange that in this cool-headed country, a measure which Governments and Members of Parliament had in vain recommended for years, should be nearly carried by a poet, namely, Rudyard Kipling, with his well-known song.

Yet the blood of national enthusiasm, which broke out in noisy demonstrations by the populace of the large towns and patriotic articles in the Press—all this, when we compare it with the results obtained, seems a case of much ado about nothing. When we see England, with its 40,000,000 inhabitants, almost at the end of its military resources when 250,000 men have been called to arms; when out of 10,000,000 adult men only 50,000 volunteer for service; when we see the English diplomats in vain attempting to conceal their political impotence as regards the Chinese question—then we wonder—where are the millions who never tire of shouting “right or wrong, my country”? Are all these millions cowardly tradesmen, who consider that they have fulfilled their obligations to their country by paying a tax of 1 per cent.? Or do the great majority of the English believe that this question

¹ Cf. *Jahrbücher*, February, 1899.

² Cf. *Jahrbücher*, July, 1900, page 47.

³ Literal rendering. The meaning is not clear. Perhaps the author means fourteen batteries?—TRANSLATOR.

which is being fought out in South Africa is no affair of theirs, and not worth the expenditure of good English blood? We shall not be far wrong if we accept the latter supposition, and assume with certainty that to defend the rights of the nation, to avert a national danger, these millions of Englishmen—like the Russians in 1812, the Prussians in 1813, and the French in 1871—will obey the call to arms, although they valued their lives too much to risk them to fill the pockets of a Rhodes or a Chamberlain.

Orders to mobilise the 5th Division (Warren's), the 6th (Kelly-Kenny's), and the 7th (Tucker's) were issued on the 11th November, and 2nd and 14th December.

Mobilisation proceeded very slowly; the time allotted was in most cases exceeded by ten or twelve days.

The 5th Division was required to reinforce Buller; the 6th and 7th Divisions were handed over to Lord Roberts, who was appointed Commander-in-Chief on the 17th December.

The Boer Attack on Ladysmith, 6th January, 1900.—Warren's division disembarked at Durban on the 20th December, but did not arrive at Frere Camp till the 9th January.

In the meantime only a small engagement before Ladysmith—on the 6th January—had interrupted the general cessation of hostilities. The Boers, aroused by the impending arrival of the English reinforcements, had at length resolved on an attack on Ladysmith. But how wretchedly the enterprise was carried out! Two storming parties, each half a battalion strong, were sent in the night of the 6th January against two points of the south front, Cæsar's Camp and Wagon Hill; the rest of the besieging force looked on idly, and could not muster energy even to demonstrate. Accordingly, the English had time and opportunity during the afternoon to reinforce the threatened points so as to obtain a decided numerical superiority, and to drive back the brave attacking party after they had scored a small initial success. Buller, who was informed by heliograph of the threatened attack on the morning of the 6th, did not venture upon anything beyond a bombardment from a respectful distance at Colenso.

Second Attempt to Relieve Ladysmith.—Not till the arrival of the reinforcements on the 9th January¹ did Buller summon up energy for a second attempt, on a larger scale, to relieve Ladysmith. He chose a line of attack further to the west, by Springfield on Acton Homes—a line which cut across the line of retreat of the Free Staters. If he had carried out this plan suddenly and without warning, it is not impossible that the Free Staters at least would have considered the advisability of making a rapid retreat to their own frontier. Instead of this, most elaborate preparations were made for the English movement, which soon betrayed it to the enemy. No later than the 10th December Dundonald's Cavalry arrived at the fords by which it was intended to cross. The Boers had withdrawn their outposts behind the Tugela, which was still

¹ For the composition of Buller's force on, and after this date, see table, p. 1104.

in flood, and could here only be crossed at two places, Potgieter's and Trichard's (or Wagon) Drifts. As the north bank was commanded by the south bank, they had entrenched themselves a couple of miles north of the Tugela on the commanding table mountains known as Dorn Kop, Vaalkrantz, Spion Kop, and Brakfontein. These flat-topped mountains are not unlike the Abyssinian Ambas¹—isolated truncated cones, with a circle of steep cliffs at the top, surrounding a slightly dome-shaped plateau, only to be approached by narrow gullies in the cliffs.

None of the English movements escaped the Boers stationed on these natural look-out posts; they looked on day by day as the railway from Frere to Springfield was built. Between the 9th and 13th January they saw long columns approach and encamp at Springfield and Spearman's Farm; from the 13th to the 15th January they watched the steam sappers puffing behind the troops, and endless columns of thousands of mules and bullocks wearily following. They looked on quietly while from the 13th to the 19th January heavy guns were placed in position on the more distant heights, Swarte Kop and Alice Kop; while pontoon bridges were thrown over the river, and troops of all arms crossed by these and by the ford at Potgieter's Drift, and established themselves on the right bank. And at last they saw on the 16th and 17th January large bodies of their opponents moved to the west from Springfield, and passed over by Wagon Drift to the north bank. I say that the Boers looked on quietly while this went on—but they did not look on idly. Screened by their mountains, they shifted their forces according to the movements of the English, so as to render nugatory all attempts to outflank them, and so that each attempt at a flank attack must encounter a well-prepared Boer front.

The Fighting at and around Spion Kop from 20th to 25th January.—

The following account of the Spion Kop battles is taken from Warren's and Buller's despatches (which were not published till 17th April, 1900), with Buller's and Lord Roberts' criticisms thereon.² The publication of these criticisms was strongly condemned both by the English daily Press and in Parliament.

Buller's "secret" plan was as follows:—The 1st Brigade (Barton's) to cover Chieveley Camp, while Warren's division, consisting of Hart's, Hildyard's, and Woodgate's brigades, was to cross Wagon Drift and advance towards Acton Homes, and there on the open plateau to take the enemy in rear, while Coke's and Lyttelton's brigades were to demonstrate at Skiet's Drift and Potgieter's Drift, supported by the naval guns, and to hold the enemy in front. Warren had rations and fodder for 3½ days, while supplies for 17 days for the whole force were packed at Spearman's Farm.

The unnecessary dismemberment of units is here already apparent. Coke's brigade is taken away from Warren, Hildyard's from Clerly, and

¹ Cf. *Jahrbücher*, November 1896, page 139.

² Also from the text of von Estorff's and Müller's pamphlets.

Clery himself personally attached to Warren's staff; while Gatacre's (3rd Division) is without a leader, and is also dismembered.

By the evening of the 19th Warren had got the whole of his men and train across, partly by a military bridge, partly by a ford, and had encamped them in Venter's Spruit Valley. On the evening of the 19th he calls a council of war. He explains to his officers that the route originally assigned to him by Acton Homes (he calls this route in error "the eastern one" instead of "the western one") will not do, as on this longer route the 3½ days' supplies to hand will not last out. He proposes, therefore, to take the north-eastern and shorter route, *viâ* Fairview and Rosalie. But, as this road runs within 200 yards of Spion Kop (N.B.—2¼ miles by the map), and as Spion Kop is occupied by the Boers, he considers that a flank march with baggage and supplies by this road is impossible. It will be necessary either to take Spion Kop or to march without supplies.

Strangely enough, the result of the council of war is a telegram to Buller, asking for more supplies. Till these are received, Warren proposes to remain at Venter's Spruit Camp, and "make special preparations."

Nevertheless, on 20th January, he began to carry out his own plan: "to march on Rosalie after carrying Spion Kop."

In the course of the day a few of the lower hillocks of Spion Kop were taken after slight skirmishes. On the 21st January Warren again found himself outflanked on his left by the Boers, and telegraphed to Buller for reinforcements and howitzers. Buller in person arrived next morning on the battle-field, with the four howitzers asked for; he had also taken away two battalions of Coke's brigade, which properly belonged to Warren, from the Skiet Drift, and returned them to Warren. He also sent over a further three days' supply of provisions. Buller was naturally dissatisfied with the state of affairs. But instead of insisting upon Warren's immediately carrying out the advance as ordered, *viâ* Acton Homes, he contented himself with blaming Warren for having been at close quarters with the enemy for four days, losing his men in expensive and purposeless fighting, and exposing even his reserves to a persistent Boer rifle-fire.

When on the 22nd Buller saw that the situation was no better, in spite of the reinforcements, he gave Warren his choice—either to carry Spion Kop or to withdraw his men over the Tugela. Warren replied that on the previous evening (the 22nd) he had offered to entrust the carrying of Spion Kop to General Coke, but that officer had objected, that an attack without previous accurate reconnaissance was impracticable. Buller reminded Warren that Coke was suffering from his leg, which he had recently broken, and recommended Woodgate for the job, "who has got two sound legs." Woodgate was directed to attack the same evening. Buller assigned an officer of his own staff to him. Woodgate took 2½ battalions of his brigade, with two companies mounted infantry and half a pioneer company. After a night ascent lasting nine hours, the hill was taken by the morning of the 24th with slight loss (only three men wounded). A dense fog obscured the view. When the fog rose, the English force was seen crowded together on the bare hill-top,

exposed without any cover to the fire of the Boers on the north peak of Spion Kop, which commands the other. In the meantime Buller's staff officer, re-assured by Woodgate's easy achievement, had gone back to the valley. He had hardly ridden down to headquarters when a heliogram came from above: "Reinforcements at once, or all is lost. General dead." Warren at once (10 a.m.) sent up Brigadier Coke with two battalions. Buller, who had received the news by heliograph, also sent up two battalions of Lyttelton's brigade from the east, so that on the afternoon of the 24th seven battalions, aggregating some 5,000 men, were crowded together on the comparatively small area of south Spion Kop. The strength of the Boers on the northern peak is said to have been 250 men with six guns.

When Warren heliographed to the troops on Spion Kop to announce the despatch of reinforcements, he ordered Colonel Crofton (who as senior regimental commander had taken over the command when Woodgate was wounded) to hold out to the utmost. Immediately afterwards Warren received a message from Buller: "If you do not put some really good hard-fighting man in command on Spion Kop, you will lose it; I recommend Thorneycroft." Warren immediately heliographed to Crofton: "With the concurrence of the Commander-in-Chief, I appoint Lieut.-Colonel Thorneycroft to command on Spion Kop, with the local rank of brigadier."

Imagine the confusion resulting from these changes of command! The senior colonel (Crofton) takes over the command from his mortally wounded brigadier-general; a second brigadier (Coke) is on his way up, and is to take charge on arrival; and now a lieutenant-colonel is put in to command over the heads of the colonel and brigadier! Nevertheless it is not to Thorneycroft, but to Coke, that Warren (at 1.10 p.m.) applies for information. He hears from Coke that the situation is critical, and that it is imperative to silence the enemy's guns, for which purpose artillery is required. Warren hesitated the whole afternoon about sending up guns as requested. In view of the importance of the affair, it was certainly his duty to ascertain, either personally or by sending an officer of his staff, to see how matters stood. But he considered it sufficient to send another heliogram at 6.10 p.m. to ask "whether it is not possible to withdraw a part of the men under cover from the enemy's fire?" It was not till later in the evening that he made preparations to send up the guns which had been asked for, and pioneers to build splinter-proof shelters. At 9.30 p.m. he ordered Brigadier Coke to come down, and interviewed him personally. Coke had hardly left, when at 10 p.m. Thorneycroft, on his own responsibility, and in spite of the energetic protests of the other officers (mostly senior to him) gave the order to abandon the hill. Halfway down the hill the descending troops met the guns going up, and naturally the latter turned about and came down again.

¹ Thorneycroft commanded a company of mounted infantry, which had been allotted to Woodgate. *Vide* Distribution Table.

Warren applied for a Court of Inquiry on Thorneycroft's conduct. But Buller held that the latter, in ordering a retreat, had only displayed "wise circumspection"; Lieut.-Colonel Thorneycroft could not have known that the guns were on their way up. Buller considered that the orders for reinforcements were issued much too late, and that Warren's conduct of this action showed a decided "want of organisation and system." On this point Roberts remarks in his despatches to the War Office:—"While fully appreciating the personal bravery shown by Lieut.-Colonel Thorneycroft, I cannot concur with General Buller that the relief of Ladysmith depended absolutely on the holding of Spion Kop. Even if Lieut.-Colonel Thorneycroft did not know that reinforcements were on their way, he should at least have held out over night, as the Boer fire could not have been very formidable in the darkness. Besides this, Lieut.-Colonel Thorneycroft should certainly have communicated with Warren or Buller before ordering a retreat. I, therefore, consider that this action in abandoning Spion Kop without asking for orders—a proceeding which upset the whole plan of operations, and caused the previous heavy sacrifices to have been made in vain—was utterly inexcusable." Roberts very rightly adds:—"It is a pity that General Warren did not visit Spion Kop himself during the afternoon or evening, since he knew that the situation was critical, and that the loss of the position would mean the failure of the whole operation." Like Buller, Roberts also finds fault with the vagueness of the orders as to who was to command, and with Warren's serious omission to inform Thorneycroft of the despatch of the artillery. Finally, he concurs with Buller as to the want of system and organisation.

But at the end of his despatch, Roberts turns sharply upon Buller:—"Whatever General Warren's faults may have been, the unfortunate result of the operations must be ascribed in part to the disinclination shown by the Commander-in-Chief to exert his authority and to see that such measures as he considered best were carried out." Roberts here alludes to the fact already mentioned, that on the morning of the 23rd Buller did not insist upon Warren's strictly complying with his orders to march on Acton Homes, but more or less looked on and grumbled while his subordinate carried out his own ideas. Whether Buller's original plan, if carried out, would have ensured success, remains an open question. But it is probable that the Boers, with their habitual dislike to taking the offensive, would hardly have interfered with the flank march to Acton Homes, but would have shifted sideways and again have formed a defensive front between Acton Homes and Ladysmith. But whether they would have found upon the open plateau such a strong natural position as Spion Kop, is at least doubtful. This was Buller's chance, which was lost by the failure of this second attempt to relieve Ladysmith.

We must briefly glance at the occurrences of the 24th and following days. During the action at Spion Kop the few troops (two battalions) remaining of Lyttelton's brigade had been obliged to content themselves with a containing action at Potgieter's Drift. As usual, the shelling of the Boer positions at the latter place was ineffective. Early on the

25th Buller proceeded to Warren's camp and again took over the command of Warren's troops. In view of the heavy losses suffered in the last few days (nearly 2,000 men, of whom nearly half were lost by the seven battalions on Spion Kop), Buller ordered a retreat across the Tugela.

And now occurred the worst instance of Boer sluggishness—a spectacle calculated to enrage a military spectator. Nearly two whole divisions, with baggage and supplies, filed slowly across at a single crossing-place under the eyes of the Boers—under the very muzzles of their rifles—for forty-eight hours, without molestation. On the morning of the 25th the baggage began to cross; 232 bullock wagons, each with a double team, passed the ford at the rate of about eight per hour. As, moreover, the ford could not be used at night, the crossing of the bullock train alone took till 2 p.m. on the 26th. At the same time 257 mule carts, with from four to ten mules, passed by the pontoon bridge. It was not till 11.30 a.m. on the 26th that the bridge was clear and the troops could begin to cross. By 4 a.m. on the 27th the troops were all over; by 8 a.m. the bridge had been dismantled and the pontoons carted away.

During the whole of this absolutely desperate manœuvre, for twice twenty-four hours, the Boers on the heights looked on and smoked their pipes. A single shell thrown on the bridge, a couple of Maxims in position, or a few minutes' rapid fire, would have indubitably brought about a complete disaster. Such indifference to one's own opportunities is unparalleled in military history. No wonder that Buller explained the incomprehensible attitude of the Boers by the supposition that they were "thoroughly disheartened" by the English attack. No wonder that the English generals plumed themselves on the successful conduct of the retreat, and that, thanks to their wonderful escape, the English troops rapidly recovered their *moral*.

Third Attempt to Relieve Ladysmith.—In fact, after resting ten days in camp at Spearman's Farm, we find Buller ready for a third attempt. He had in the meantime received artillery reinforcements (eighteen naval Q.F. guns and eight 6-inch howitzers) from Durban. He used the heavy guns to strengthen the artillery position on Zwart Kop, which had been occupied the whole time. Buller's plan this time was to break through the centre of the Boer line, which extended for 20 miles from Spion Kop to Grobler's Kloof. The point selected for attack was Vaal Krantz, a hill lying between the two roads to Ladysmith from Skiet Drift and Potgieter's Drift respectively.¹

Action at Vaal Krantz, 5th and 6th February, 1900.—Buller's strategy is again highly original. In the first place, he again publicly announces the day and hour of the intended surprise; as early as 3rd February he

¹ The nomenclature of the English staff map is here plainly in error. On this map a mountain in the Brakfontein range, between the two northerly bends of the Tugela, is marked as Vaal Krantz; while according to Buller's report, the "Vaal Krantz" referred to is certainly a height due east of the eastern bend of the Tugela, which forms the southern termination of the Krantz.

moves the whole of his troops out of their camp and aligns them in close formation opposite the intended point of attack. Then he leaves the Boers two days' time to make their arrangements—that is, to concentrate troops from both flanks on the point threatened. Next, on the morning of the 5th, he makes a demonstration. The 11th Brigade (late Woodgate's, now Wynne's) advances at 9 a.m. with a strong force (6 batteries) of artillery through Potgieter's Drift, on the Brakfontein heights; but the unreal nature of the demonstration is betrayed by the fact that they only advance to 1,600 yards, and at this range open a naturally ineffective fire. The artillery had opened at about 2,200 yards on the Brakfontein heights.

In the meantime, Lyttelton's brigade, which was intended to make the main attack, had succeeded in advancing past the northern slopes of Zwarte Kop, along the deep, narrow river-bed—a regular defile—past the flank of the Boers, to the northern extremity of the east bend of the Tugela. There they drove in a few weak Boer outposts, threw a pontoon bridge across the river, and crossed in safety.

The scheme had been so far correctly carried out. Now comes an incredible blunder: Lyttelton's brigade, which is formed up in readiness on the slopes of the Vaal Krantz, with its back to the river, cannot attack without artillery. But almost the whole of the artillery had been sent with Wynne's brigade; so Lyttelton has to wait for hours in this extremely dangerous situation till Wynne's brigade has returned behind the Tugela, and the six batteries have opened an effective fire on Vaal Krantz from the eastern slopes of Zwarte Kop. In their unholy dislike for the offensive, the Boers let the golden opportunity slip; they had only to advance to drive Lyttelton into the river. For once in a way, however, the Boer gunners do not allow Wynne's brigade and the six batteries to withdraw unmolested; the latter especially came under a most unpleasant cross-fire from Spion Kop and the Brakfontein heights. But although somewhat knocked about, the English artillery succeed in taking up their new position by mid-day. While the heavy guns on Alice Kop and Zwarte Kop kept down the Boer artillery on Spion Kop and Brakfontein Heights the six field batteries shelled Vaal Krantz with such good effect that Lyttelton's brigade succeeded in carrying the position at a rush without great loss. And, thanks to the assistance of the artillery, a Boer counter-attack was easily repulsed.

And what is Buller's next move, now that his way is clear to break through? Although he has his whole force (five brigades) formed up ready under cover on the southern slope of Zwarte Kop, he does nothing to follow up the victory of his advanced guard in force. The day wears on, and Lyttelton's brigade remains completely isolated. Even during the night they suffer heavily from the Boer fire, as their position is lighted up by a veldt fire. The whole of next day is occupied with an idle bombardment. In the meantime the Boers have placed a heavy gun in position on Dorn Kloof, and posted a semi-circle of riflemen on the hills north and east of Vaal Krantz. And what does Buller do? He orders Lyttelton's brigade, which has fought all by itself for twenty-four hours

and is thoroughly exhausted, to be relieved at 6 p.m. by Hildyard's brigade—much as a picket is relieved when not closely in touch with the enemy. As the Boers were not imposed upon by this splendid and certainly astounding manœuvre, but continued to fire upon Vaal Krantz, Buller recalled Hildyard's brigade back to the other five on the night of the 7th.

And this was the end of the third attempt to relieve Ladysmith—400 men disabled, almost all of Lyttelton's brigade.

It is to be regretted that Roberts' criticisms on this most glorious "twenty-four hours of Buller's tactics" have not been published. After such an exhibition on the part of the English Commander-in-Chief, there is not the slightest doubt that but for the complete change in the situation due to Roberts' intervention, he would never have succeeded in relieving Ladysmith.

(To be continued.)

A GARRISON ARTILLERY COMPANY IN THE FIELD.

By Lieutenant A. M. SETON, R.A.

AT a time when the question of the employment of heavy¹ guns in the field is receiving much attention from soldiers, a few notes on the performances in South Africa of a Garrison Artillery company armed with such pieces may prove of some interest.

The comparative lack of mobility of heavy guns has been generally held to constitute an almost insuperable drawback to their employment in purely field operations. There have certainly been instances in history, of heavy guns being brought into the field—such as the "Shannon's" 8-inch guns brought to the front by Captain Peel's Naval Brigade in the Mutiny, and the heavy guns used by the Greeks in Thessaly during the late war with Turkey; but not until the present war was it generally realised what possibilities may lie before such ordnance in the campaigns of the future.

The experiences of No. 6 Company, Eastern Division, though similar in some respects to those of other Garrison Artillery companies in South Africa, were particularly instructive with regard to the all-important question of mobility. This company, under the command of Major A. B. Shute, R.G.A., landed in South Africa early in 1900. After some weeks' delay at Cape Town, the right-half company (with the career of which we are particularly concerned) received orders for the front.

Equipment.—The above half company was armed with two 5-inch B.L. guns, originally built for the Navy in 1885-86. The upper carriages were of the ordinary naval 5-inch Vasseur pattern; the lower carriages or mountings were extemporised at the Salt River Railway Works, Cape Town, and resembled in general construction the 40-pounder R.M.L. pattern, but were strengthened by special steel cross transoms. The wheels were of wood, 50 inches in diameter and 7 inches broad. The trails were long and about 45 inches broad. The mountings, though somewhat clumsy in appearance, were very strong and stable, and stood well the severe tests to which they were later subjected.

The limbers employed were of the ordinary 15-pounder B.L. pattern, adapted for bullock-draught, and fitted to carry six rounds of 5-inch ammunition per gun.

¹ The word "heavy" is throughout this paper used as a relative term, and not in the technical artillery sense of the word.

The total draught-weight was about 5 tons. Recoil was effectively checked by means of the buffers, assisted by two large recoil scotches carried on the trail.

Sighting.—The sighting arrangements consisted of the ordinary acorn and tangent scale supplemented by a telescopic sight. The latter was mounted on a T-bar, having a slot at one end, and a claw at the other fitting over fore-sight and the deflection leaf of the hind-sight respectively. The gun was first laid roughly by the ordinary sights, and then carefully by the telescopic sights. This method of laying proved very satisfactory, being both rapid and accurate.

Bullock draught was employed throughout. A team of 20 bullocks was found sufficient to draw the gun and limber over all ordinary ground, though in certain cases the teams had to be increased. As draught-animals the bullocks proved most useful. Subsisting almost entirely on grazing, they required but little forage to be carried for them. They were found steady and manageable, and generally well suited to slow heavy work. On the other hand, bullocks did not work well in the heat of the day; and when grazing was scarce and the work continuously heavy, they sickened and died in large numbers.

Ammunition.—The ammunition was carried in South African buck-wagons, 50 rounds complete in each wagon, with a total of 400 rounds for each gun. Two wagons accompanied each gun into action, the remainder being left with the baggage or convoy. The ammunition used was Lyddite, common, and shrapnel shell.

Drill.—Each gun detachment consisted of a sergeant (No. 1) and 6 other numbers. The drill was an adaptation of the Field Artillery drill, but possessed no special features. Ranges were found with the mekometer by a special ranging party, just as in the Field Artillery.

Leaving Cape Town on 19th June, the half company arrived at Bloemfontein by train on 22nd June; there Major Shute received orders to proceed at once by rail to Winberg, and to march thence to Senekal, to join General Rundle's division. At Bloemfontein a full equipment was drawn and entrained—800 rounds of ammunition, reserve supplies, etc., with the necessary transport of 12 buck-wagons and 240 bullocks. Winberg was reached by train on 24th June, and from here the company marched to Senekal, arriving there on 27th. Fighting was going on all round, and the following afternoon the two 5-inch guns were engaged for the first time; 25 shell were fired at a range of about 5,000 yards, the enemy's fire was silenced and a pom-pom disabled.

Bethlehem.—For several succeeding days the guns were continually on the march, and engaged the enemy's artillery in occasional long-range duels. On the 7th July, the company arrived at Bethlehem and joined General Paget's force. Next day the two guns co-operated in the attack of the enemy's very strong position near that town. Firing continued all day—in some cases up to ranges of 9,000 yards; 200 rounds were fired, and the company earned General Clements' warm praise for the valuable services it had rendered in subduing the hostile artillery fire and

in supporting the infantry attack. One of the enemy's guns was disabled, and subsequently captured.

Slabbert's Nek.—After another interval of marching, with a six days' halt at Biddulphsberg, the brigade reached Slabbert's Nek on 22nd July, and joined hands with General Hunter's force. The Boers had entrenched themselves in a very strong position, both flanks being secured by steep and inaccessible hills. The Boer artillery was occupying a central position, and was engaged by the two 5-inch guns and the field artillery. Fire was opened at 5,000 yards, but later the 5-inch guns advanced to 3,000 yards, and maintained a vigorous bombardment of the whole position. The practice of the 5-inch guns proved to have been excellent, as the enemy's gun epaulments were badly knocked about. One lucky shell burst in an epaulment, damaged the gun, and blew a French officer in charge to pieces; the Boers admitted that they afterwards could only find one of his boots! Leaving Slabbert's Nek on 24th July, the company arrived at Fouriesberg on 27th. On the march the 5-inch guns were engaged in occasional desultory duels with the enemy's long-range guns.

Prinsloo's Surrender.—On 28th, the whole force under General Hunter, marched out of Fouriesberg to assist in the enveloping movement against Prinsloo's commando. The Boers offered a vigorous resistance, and a "Long Tom," which was quite out of the range of the field artillery, seriously hindered the advance. The two 5-inch guns were brought up, and the fourth shell silenced the Boer gun for the remainder of the day; the Boers said that this shell burst in the emplacement and wounded every man in the detachment. The fight continued all day, and the 5-inch guns kept up a bombardment throughout. On the advance of our infantry towards evening, the Boers slowly evacuated. Next day negotiations were opened by Prinsloo, who surrendered unconditionally with his commando on 30th July. On coming into the British lines several of Prinsloo's officers asked to see the terrible guns, the fire of which, said they, had greatly accelerated their surrender. One was overheard to remark with undisguised satisfaction: "Good-bye to *ê domm leedyte cannon!*"

After Prinsloo's surrender, Major Shute received orders on 1st August to march to Kroonstad, with the two 5-inch guns. This march of 117 miles over ordinary country was accomplished without incident in 9 days, and the company entered Kroonstad, on 9th August. Starting from here on 11th for Elandsfontein, Viljoen's Drift Station was reached on 16th. Here orders were received to entrain for Pretoria, and the company arrived at the latter place early on the 17th, and immediately joined General Paget's force. The following fortnight was occupied by small operations, during which the two 5-inch guns, though continually on the march, did not come into action.

Warmbad.—On August 27th, the force halted at Warmbad, and, an attack being apprehended, the two 5-inch guns were placed in a strongly entrenched position. On 3rd September, the Boers attacked Warmbad, and engaged the two 5-inch guns with two 4·7-inch howitzers; a short duel ensued at about 5,000 yards range, but the howitzers were unable

to make any impression on the 5-inch guns and were finally compelled to retire. The latter now turned their attention to some Kaffir kraals at a range of about 6,500 yards, soon rendering them untenable, and causing casualties among the Boers who had held them. The shooting was throughout the day remarkably accurate and satisfactory.

Minor Operations in the Transvaal.—During the next two months the guns, which were still attached to General Paget's force, took part in numerous minor operations to the west and north-west of Pretoria in the neighbourhood of Pienaar's River, Hebron, Zoutpan, Waterval, Nooitgedacht, Rustenburg, etc., and finally returned to Pretoria, on 25th November.

In Conclusion.—This half company of Garrison Artillery, armed with two 5-inch guns, operated for five months, nearly continuously, with an active field force. During this period it marched 970 miles over many types of country, accomplishing on some occasions, for several days together, an average of from 15 to 18 miles a day; on other occasions from 22 to 25 miles in a single day. The guns took part in 16 engagements greater or less, in several of which they rendered signal services.

Performances such as these speak for themselves, and the lessons to be deduced from them would seem to demand the most earnest attention from those interested in the development of our artillery.¹

¹The above account is compiled principally from the notes and diaries of Major Shute and Sergeant-Major Nixon, who were with the guns throughout the operations described.

NAVAL NOTES.

HOME.—The following are the principal appointments which have been made: Captains—R. W. White to "Ocean"; W. B. Fisher, C.B. to "Anson"; F. S. Pelham to "Fox"; R. H. S. Bacon, D.S.O. to "Hazard"; W. S. Rees, C.B. to "Amphitrite"; A. W. Chisholm-Batten to "Formidable"; E. H. Gamble to "Empress of India"; J. Ferris to "Caesar"; S. V. Y. De Horsey to "Iphigenia." Commander—R. Sullivan to "Agincourt."

The Naval Manœuvres came to an end on 5th August, and all the ships specially commissioned have been paid off. The Umpires' Report has not yet been published. The Channel Fleet joined the Mediterranean Fleet off St. Vincent, on the 31st ult., for a combined cruise for tactical purposes in the Atlantic, the whole fleet being under the command of Vice-Admiral Sir J. Fisher, Commander-in-Chief in the Mediterranean. The first-class cruisers "Diamant" and "Niobe" have been temporarily detached from the Channel Squadron, and have relieved the "St. George" and "Juno," as escort to the "Ophir." The second-class cruiser "Hermione" from China paid off at Malta, on the 15th ult., where she will undergo refit, and the second-class cruiser "Bonaventure" from the same station paid off on the 29th ult., at Devonport. The first-class torpedo-gun-boat "Hazard" has been commissioned at Devonport by Captain R. Bacon, D.S.O., for special service in connection with the new submarine flotilla, of which she will be the flag-ship. The first-class cruiser "Amphitrite" is to be commissioned to convey a new crew to Malta for the first-class battle-ship "Illustrious," which will pay off and recommission at that port; the second-class cruiser "Iphigenia" is also to be commissioned for relief service to the Mediterranean. The first-class battle-ship "Implacable" was commissioned on the 10th inst. at Devonport by Captain H.S.H. Prince Louis of Battenberg, G.C.B., G.C.V.O., for service in the Mediterranean, where she will relieve the "Empress of India," the officers and crew of which ship will turn over to the "Caesar," whose crew will in turn bring the "Empress of India" home. When the Channel Fleet returns to England, the officers and crew of the "Resolution" will turn over to the new first-class battle-ship "Formidable" at Portsmouth, and the first-named ship after a thorough refit, is to take the place of the "Trafalgar" at Portsmouth as port guard-ship. The second-class cruiser "Sappho" from the Cape arrived at Sheerness on the 21st ult., for repairs after having been on shore. In consequence of serious defects the third-class cruiser "Pelorus," belonging to the Channel Squadron, is to pay off and her crew will turn over to the "Prometheus," a sister ship. The second-class cruiser "Fox" commissioned on the 10th inst. at Portsmouth for the East Indies, where she relieves the third-class cruiser "Marathon."

Loss of the "Viper."—A court-martial assembled on the "Victory" at Portsmouth, on the 16th ult., for the trial of Lieutenant Speke for the loss of the destroyer "Viper," which occurred on the 3rd ult. at Renouquet Rock, Channel Islands, during the manœuvres. The Court found that as Lieutenant Speke was the officer of the watch, the remaining officers and ship's company were exonerated, but considered Lieutenant Speke guilty of negligence in not taking greater precautions when approaching land in thick weather, and not having the navigating records more carefully kept. Considering the important nature of the service in which he was employed, they adjudged him to be reprimanded. The Court added their appreciation of the good order and

discipline maintained after the ship stranded, and considered that great credit is due to Lieutenant Speke for the manner in which he saved the ship's company and endeavoured to save the ship.

Steam Trials.—The new first-class battle-ship "Vengeance" has satisfactorily concluded her trials. At her thirty hours' trial at one-fifth her power, she drew 26 feet fore and aft, and had 254 lbs. of steam in her boilers. The vacuum was 26·8 inches starboard, and 26·9 inches port, and the revolutions were 65·11 starboard, and 65·88 port. The collective I.H.P. was 2,885, which gave the ship a speed of 11·35 knots. The coal consumption was 1·69 lbs. per unit of power per hour. At her four-fifths trial the coal consumption was 1·51 lbs., and the speed of ship 17·5 knots, the engines developing 10,387-I.H.P. and making 102 revolutions. At her full-speed trial the ship drew 26 feet on an even keel, and had 298 lbs. of steam in her boilers. The vacuum was 26 inches, and the revolutions were 110·8 starboard, and 110·5 port. The total I.H.P. was 13,852, which gave the ship a speed of 18½ knots. The coal consumption was 1·72 lbs. per unit of power per hour.

The new sloop "Espiegle," built at Sheerness Dockyard, has completed her official steam trials, the results being as follows:—Thirty hours' trial at three-fourteenths full H.P.—pressure of steam in boilers, 204·9 lbs.; pressure of steam at engines, 202·2 lbs.; vacuum—starboard, 26·48 inches; port, 26·04 inches; revolutions—starboard, 124·8; port, 126·3; I.H.P.—starboard, 175·7; port, 162; total I.H.P., 337·7; speed, 10 knots; coal consumption, 1·53 lbs. per I.H.P. per hour. Trial at five-sevenths full H.P.—pressure of steam in boilers, 211·6 lbs.; pressure of steam at engines, 197·4 lbs.; vacuum—starboard, 25·4 inches; port, 25·4 inches; revolutions—starboard, 178·7; port, 179·3; I.H.P.—starboard, 515·7; port, 515·2—total I.H.P., 1,030·9; speed, 13·5 knots; coal consumption, 1·55 lbs. per I.H.P. per hour. Eight hours' full-power trial—pressure of steam in boilers, 213·1 lbs.; pressure of steam at engines, 198·9 lbs.; vacuum—starboard, 26·72 inches; port, 26·84 inches; revolutions—starboard, 197·6; port, 200·6; I.H.P.—starboard, 720·2; port, 704·8—total I.H.P., 1,425; speed, 13·5 knots; coal consumption, 1·59 lbs. per I.H.P. per hour. The whole of the trials were successful, the I.H.P. at the full-power trial being 25 in excess of the power stipulated in the contract with the Wallsend Slipway and Engineering Company. The "Espiegle" is fitted with the Babcock and Wilcox water-tube boilers.

The "Victoria and Albert."—His Majesty's new yacht "Victoria and Albert," Commodore the Hon. H. Lambton, C.B., arrived at Portsmouth on the morning of Saturday, 24th ult., on her return from her experimental cruise to Gibraltar, the object of the trial being solely to test the sea-keeping capacity of the vessel. Only nine out of her 18 boilers were used, and until the last day no attempt was made to exceed 14 knots, and then without lighting up any additional boilers the speed was increased to 15 knots. The weather was admirably suited for the trial, both for the ship and for the crew, as for 36 hours the vessel was in a strong breeze, which occasionally amounted to nearly half a gale.

The yacht left Portsmouth at 4 o'clock on the afternoon of the 14th ult., drawing 19 feet 3 inches forward and 19 feet 9 inches aft. She proceeded at 14 knots in fine weather until she reached Ushant, when she picked up heavy weather, which continued until she reached Cape Finisterre. The westerly wind struck her directly on her starboard beam and caused her to roll on an average 7°: the heaviest roll, however, was 10° with return roll of 13°; but whereas on the contractors' trials the ship showed a sluggishness in righting herself in a heavy sea, this defect was found to have entirely vanished. The stability of the ship having thus been established, Commodore Lambton subjected her to further tests, such as circling in the trough of the sea and bringing every point of the ship up to the force of the wind and sea; but, whether pitching or rolling, the vessel behaved admirably, answering her helm with precision and righting herself with promptitude. As Commodore Lambton, in his signal to Admiral Sir E. H. Seymour said, the yacht behaved splendidly; and if any doubts had previously existed on board as to the vessel's seaworthiness they were dispelled. On leaving the Bay of Biscay the ship ran into a

succession of fog banks, and speed had to be frequently altered. Seven knots was the lowest reached, but occasionally the engines had to be stopped altogether when the fog became too thick. These intervals, however, never lasted more than a few minutes at a time. It was intended to reach Gibraltar on the night of Saturday, the 17th, but owing to delays by fog the yacht did not drop anchor until Sunday morning. She left Portsmouth with 650 tons of coal on board, and when she reached Gibraltar it was found that she had an ample supply on board to take her home, while, what was no less gratifying to the engine-room department, it was ascertained that her water supply was also sufficient.

Leave was given at Gibraltar, and at 11 o'clock on Monday the yacht left for Lisbon, which was reached on the following day, where leave was again given to allow the crew to visit Cintra. Lisbon was left at 7 o'clock on Wednesday morning, and the same day the yacht anchored in Cascaes Bay, where the King of Portugal and his two sons went on board and remained for an hour and a half. The King, taking with him the Portuguese Minister, who warmly thanked the officers for the great pleasure the trip had afforded him, then returned to his yacht, which was lying in the bay, and the "Victoria and Albert" proceeded home. Again the vessel encountered numerous fog banks, and it was not until Friday afternoon that she ran into perfectly clear weather. Throughout the trip the engines worked with the utmost smoothness, and at no time was there any vibration, while the boilers proved themselves so economical that, with 650 tons of coal in the bunkers, the yacht has a radius of 2,500 miles, as she had about 40 tons left when she arrived at Portsmouth. She encountered worse weather than is likely to be experienced when Royal travellers are on board, and fully demonstrated her seaworthiness. In the opinion of the officers of the yacht the trial was a complete success.

Launcher.—The new first-class armoured cruiser "Leviathan" was launched from the yard of Messrs. J. Brown & Co., at Clydebank, on the 3rd July. The vessel is of the same type as the "Drake," built at Pembroke Dockyard, "King Alfred," built at Barrow, and "Good Hope," built at Fairfield. She is 500 feet in length between perpendiculars and 71 feet 3 inches in beam, with a displacement of 14,160 tons, I.H.P. of 30,000, and a speed of 23 knots. The armament consists of two 9.2-inch, sixteen 6-inch Q.F., fourteen 12-pounders Q.F., and several lighter guns. The 9.2-inch guns will be mounted in separate barbettes, and the 6-inch guns in casemates, the protection being afforded by 6-inch armour of hard steel. Water-tube boilers of the Belleville type will be fitted to give an I.H.P. of 30,000, the measured mile speed in an eight hours' trial is to be 23 knots, and the continuous sea speed in smooth water 21 knots. The capacity of the coal bunkers will be 2,500 tons, and 1,250 tons will be carried at the speed trials.

On the 17th July, the new first-class battle-ship "Cornwallis" was launched from the works of the Thames Iron Ship-building Company, Blackwall. The "Cornwallis" is one of six vessels now building in this country for the Navy, the class taking its name from the "Duncan," which is being built by the same company, and was launched in March last.

In general constructive details the "Cornwallis" follows the usual methods employed for ships of this class in the Navy. She is built on the usual bracket-frame system, with wing passages on each side to be used for holding coal. She has a double bottom amidships, with water-tight flats at the ends of the vessel, thus having a double bottom from end to end. The armour is of Krupp cemented steel, but of English make. The side protection consists of a belt which extends from the stem to within 140 feet of the stern. The belt is 14 feet in maximum depth. It is 7 inches thick amidships, and tapers to 3 inches thick at the fore end. It has a vertical extension of 5 feet below the water-line and 9 feet above at the designed load draught, being carried to the height of the main deck for a length of 286 feet. Between the armour deck and the belt deck there is a screen bulkhead aft, which joins the after barrette to the side armour, and abaft this is 1½-inch mild steel plating in three thicknesses. The armoured deck is arranged according to the principle now adopted in ships of this class, its sides meeting the lower edges of the belt. It has sufficient curve to rise

2 feet 6 inches above the water-line amidships, and is 2.5 inches thick. The main deck is 2 inches thick over the citadel, thus adding to the protective features. The two barbettes are circular in plan, and are placed on the fore and aft centre line. The armour on them has a maximum thickness of 11 inches, and runs to a height of 3 feet above the upper deck. There are eight water-tight casemates on the main deck and four on the upper deck, all of Harveyized armour on the outside, and having armour-plating at the back to protect the guns' crews from explosive shells. The vessel is fitted with twin-screws, the propelling engines being supplied by the company's works at Greenwich. They are triple-expansion engines with four vertical cylinders, each of the collective H.P. of 9,000, giving an aggregate of 18,000-H.P. The cylinders are 33½ inches, 54½ inches, and 63 inches in diameter, with a stroke of 4 feet, and the number of revolutions 120 per minute when developing 18,000-I.H.P. There are two main condensers, having a cooling surface of 19,000 square feet. There are 24 Belleville boilers, having a total collective heating surface of 43,260 square feet and a fire-grate surface of 1,375 square feet.

The "Cornwallis" is to be fitted as a flag-ship, accommodation being provided for an admiral and officers, or a total complement of 778 officers and men. Her dimensions are as follows:—Length over all, 429 feet; length between perpendiculars, 405 feet; beam, extreme, 75 feet 6 inches; depth, top of keel to upper deck, 43 feet 9 inches; draught of water, mean, 26 feet 6 inches; displacement at that draught, 14,000 tons; I.H.P., 18,000; speed, 19 knots. Her armament comprises four 12-inch B.L. guns in barbettes, twelve 6-inch Q.F. guns in casemates, ten 12-pounder 12-cwt. Q.F. guns, six 3-pounder Q.F. guns, eight 303-inch machine Maxims, one 12-pounder 8-cwt. for boats, one 12-pounder 8-cwt. for field, and four submerged torpedo-tubes.

A sister ship, the "Exmouth," was floated out at Messrs. Laird's works at Birkenhead on 31st August. The great advantage of the "Exmouth" class as compared with former vessels is, although of slightly inferior armour protection, that they are longer on 1,000 tons less displacement, being the longest battle-ships ever built for the Navy. With engines of 18,000-H.P.,—by far the most powerful ever fitted into a battle-ship—they are expected to reach the high speed of 19 knots, which enables them to compete in mobility with many a so-called cruiser.

The new first-class armoured cruiser "Essex" was launched from Pembroke Dock-yard on the 29th ult., and the "Bedford," a sister ship, was launched two days later on Saturday, the 31st ult., from the yard of the Fairfield Shipbuilding Company at Govan, on the Clyde. The "Essex" was laid down on 1st January, 1900, and has, therefore, been about twenty months under construction. Eight other ships of the same type are building, namely, the "Kent," "Suffolk," Cornwall," "Monmouth," "Lancaster," "Cumberland," "Donegal," and "Berwick," the three first-named in Royal Dockyards, and the others by private contract. Their dimensions are:—Length between perpendiculars, 440 feet; extreme beam, 65 feet; displacement, 9,800 tons; mean draught, 24 feet 6 inches. The framework of the hulls beneath the engine and boiler-rooms is formed on the cellular principle, and is plated both inside and out. In other parts, except where there is armour, only an outer plating is worked. To increase the general strength of the structure five strokes of special steel plates have been worked on each side of the keel right fore and aft. The stem, stern post, and shaft brackets are heavy steel castings. Two thick decks—one enclosing the vital parts of the ship, and the other immediately above it—extend, the former from end to end of the ship, and the other as far as the side armour is carried. Aft the engine-room, between these decks, there is a bulkhead plated with 3-inch Krupp armour, and from that point forward to the bows vertical armour of the same description, which decreases from 4 inches to 2 inches thick, is fitted. Aft the armour bulkhead, the lower deck, which is the only protection the ship has, is increased from ½ inch to 2 inches in thickness. Before that bulkhead, the lower protective deck slopes upward, and, above the engine-room, the two thick decks are worked together as an additional protection for the engines. Within the area covered by the armour the upper protective, or main deck, is formed of two plates, each ½ inch thick. Elsewhere it consists of a single thinner plate. The

outer bottom plating of the ship ranges from 9-16ths inch to $\frac{3}{4}$ inch in thickness, and the inner bottom from 7-16ths inch to $\frac{1}{2}$ inch in thickness. The longitudinals are formed of 7-16ths inch plates and angles. Between the two bottom platings the frames are all brackets; elsewhere they are Z angles. All the decks are formed of steel, but only the upper and fore-castle decks are to be covered with wood. Corticene is to be used on the main deck, with cork mats in the cabins.

The ship will be propelled by two independent sets of triple-expansion engines, each having one high, one intermediate, and two low-pressure cylinders. Steam will be supplied from 31 Belleville water-tube boilers, the pressure at the boilers being 300 lbs. to the square inch, reduced to 250 lbs. at the high-pressure cylinders. Working with the natural draught, the engines are expected to develop unitedly 22,000-H.P., giving the ship a maximum speed of 23 knots per hour. Two steel masts and three funnels are to be fitted. Messrs. John Brown & Co., Glasgow, are supplying the engines of the "Essex." The armament will consist of fourteen 6-inch Q.F. guns, eight 12-pounders, three 3-pounders, eight Maxims, and two boat and field guns. Two submerged torpedo-tubes are to be fitted, and the ship will carry seven 18-inch and five 14-inch torpedoes, the latter being for use with boats. The crew will number 678 officers and men.

The cost of the ship when complete will be:—Dockyard labour, £172,690; materials, £201,970; contract work, propelling and other machinery, £272,359; establishment and incidental charges, £44,185; guns, £29,980; total, £721,184. The expenditure on her up to 31st March last has been £282,213. The amount proposed to be expended on her during the current financial year is £231,842, of which £46,000 is for dockyard labour.—*Times* and *Naval and Military Record*.

AUSTRIA-HUNGARY.—*The Naval Estimates, 1900-01.*—The Ordinary Budget for the Navy for the current year amounts to 28,521,660 kronen (£1,188,402 10s.), an increase of 2,965,610 kronen (£123,567) over 1899-1900; and the Extraordinary Estimates to 14,969,160 kronen (£623,715), an increase of 1,058,710 kronen (£44,113), or a total increase of 4,024,320 kronen (£167,680).

The principal items of the Ordinary Estimates are as follows:—

| | Kronen. | £ | s. |
|---|-----------|---|-------------|
| Pay of officers, etc. | 4,142,810 | = | (172,617 2) |
| Pay of petty officers and seamen, with clothing | 2,603,000 | | (108,458 6) |
| Land service | 1,733,360 | | (72,223 6) |
| Sea service | 3,783,970 | | (157,665 8) |

Establishments:—

| | | |
|--|---------|------------|
| Hydrographical Office and Naval Library | 63,940 | (2,626 13) |
| Naval Academy | 191,750 | (7,989 11) |
| Naval Lower-grade Schools | 4,320 | (180 0) |
| Naval Hospitals | 200,460 | (8,352 10) |

Maintenance of the Fleet:—

| | | |
|---------------------------------------|-----------|--------------|
| Dockyards, repairs, and material | 7,999,770 | (295,823 15) |
|---------------------------------------|-----------|--------------|

New Ships and Machinery:—

| | | |
|---|-----------|------------|
| Fifth and last Vote out of a total increased Vote of 3,585,240 kronen (£149,385) for torpedo-cruiser "Aspern" (B) of 2,350 tons displacement, Ersatz "Helgoland" | 390,000 | (16,250 0) |
| Third Vote out of a total Vote of 3,478,000 kronen (£144,916 13s.) for torpedo-cruiser "Szigetvár" (C) of 2,350 tons displacement, Ersatz "Pasana" | 1,100,000 | (45,833 6) |
| Second Vote out of a total Vote of 11,785,950 kronen (£491,043 15s.) for ram-cruiser (E) of 7,300 tons displacement, Ersatz "Radetzky" | 2,000,000 | (83,333 7) |

New Ships and Machinery (contd.) :—

| | Kronen. | £ | s. |
|--|------------|------------|-----|
| Second and last Vote out of a total increased Vote of 290,000 kronen (£12,083 7s.) for five submarine-mining tenders of 200 tons displacement | 160,000 | (6,666 | 13) |
| First Vote out of a total approximate Vote of 16,500,000 kronen (£687,500) for battle-ship (A) of about 10,000 tons displacement. | | | |
| Ersatz "Laudon" | 1,200,000 | (50,000 | 0) |
| Ordnance, etc. | 978,000 | (40,750 | 0) |
| Miscellaneous expenses | 3,091,180 | (128,799 | 3) |
| Total | 28,741,660 | (1,197,569 | 0) |
| Certain deduction | 220,000 | (9,166 | 10) |
| Total | 28,521,660 | (1,188,402 | 10) |

The following are the principal items of the Extraordinary Estimates :—

Certain expenses in connection with Naval Academy, naval schools, ships' libraries, chronometers, etc. 24,160 (1,006 13)

Maintenance of the Fleet—New ships and machinery :—

| | | | |
|---|-----------|----------|-----|
| Sixth and last Vote out of a total Vote of 8,286,950 kronen (£345,289 12s.) for ram-cruiser "Kaiser Karl VI." (D) of 6,250 tons displacement | 300,000 | (12,500 | 0) |
| Fourth Vote out of a total Vote of 12,123,810 kronen (£505,158 15s.) for coast-defence battle-ship "Habsburg" (I) of 8,340 tons displacement | 3,400,000 | (141,666 | 13) |
| Third Vote out of total Vote of 12,756,430 kronen (£531,517 18s.) for coast-defence battle-ship (II) of 8,340 tons displacement | 3,700,000 | (154,166 | 13) |
| Second Vote out of a total Vote of 12,905,000 kronen (£537,708 7s.) for coast-defence battle-ship (III) of 8,340 tons displacement | 2,000,000 | (83,333 | 7) |

Ordnance—Guns, Mountings, Torpedoes, etc. :—

| | | | |
|---|------------|----------|-----|
| Fourth and last Vote for armament of ram-cruiser "Kaiser Karl VI." (D) | 64,000 | (2,250 | 0) |
| Second Vote for armament of torpedo-cruiser "Szigetvár" (C) | 172,570 | (7,190 | 8) |
| Second Vote for armament of coast-defence battle-ship "Habsburg" (I) | 824,760 | (34,365 | 0) |
| Second Vote for armament of coast-defence battle-ship "II." | 793,330 | (33,055 | 9) |
| First Vote for armament of coast-defence battle-ship "III." | 300,000 | (12,500 | 0) |
| First Vote for armament of ram-cruiser "E" ... | 200,000 | (8,333 | 7) |
| Vote for 8-millimetre machine guns and fittings | 48,000 | (2,000 | 0) |
| Votes for ammunition, etc., for "Zenta," "Kaiser Karl VI.," "Aspern," "Szigetvár," "Habsburg" I, II, and for 15-centimetre Q.F. guns | 2,181,910 | (90,912 | 18) |
| Submarine mines | 119,430 | (4,976 | 5) |
| Torpedoes and torpedo-nets | 180,000 | (7,500 | 0) |
| Workshops, buildings, and other works ... | 641,000 | (26,708 | 7) |
| Total | 14,969,160 | (623,715 | 0) |

Evolutionary Squadron.—The Reserve Squadron was mobilised in June for evolutionary purposes at Pola, under telegraphic orders from the Minister of Marine. In thirty-six hours after the receipt of the telegram, the squadron was reported ready to put to sea. It is under the command of Rear-Admiral G. Ritter von Brosch, who has hoisted his flag on board the first-class armoured cruiser "Kaiser Karl VI." The squadron is further composed of the :—

Third-class battle-ship—"Tegetthoff."

First-class cruiser—"Kaiser Franz Josef I."

Torpedo-avisos—"Sebenico," "Zara," "Panther," "Salamander."

The Danube Flotilla, consisting of the river monitors "Leitha," "Maros," "Körös," and "Szamos," with a patrol-boat and a torpedo-boat, have proceeded up the river to Linz, where they have been taking part in some manoeuvres with the troops, who were to attempt to force a passage of the river below Kornenburg. The two first-named vessels were built in 1871: they have a displacement of 310 tons, and can only steam 8 knots, but they only draw 6 feet of water; their armament consists of one 5-inch gun, with 2 machine guns: they are protected by a 2-inch belt, and 3-inch on the barbettes for the 5-inch gun; the two last-named are larger, having a displacement of 448 tons, but with the same light draught; their engines are more powerful, developing 1,250-I.H.P., giving a speed of 15 knots, while they carry an additional 5-inch gun, and two small Q.F. guns besides the two machine guns.

New ships.—The new first-class armoured cruiser E, which is being built to replace the old armour-clad "Radezky," now used as the gunnery school-ship, is a vessel of 7,400 tons displacement, with a length of 383 feet 10 inches, a beam of 61 feet 8 inches, with a mean draught of 21 feet 4 inches. Her engines are to develop 13,200-I.H.P. to give a speed of 21 knots, and she will have water-tube boilers of the Yarrow type, and her normal coal supply will be 750 tons. Her armament will consist of two 24-centimetre (9·4-inch) 40-calibre guns in barbettes, one forward and one aft; ten 15-centimetre (5·9-inch) Q.F. 40-calibre Skoda guns in casemates, with twenty-seven smaller Q.F. and machine guns, with four torpedo-discharges. Protection will be afforded by a partial armour water-line belt, extending between the two barbettes of 9-inch hard steel, with 8-inch armoured bulkheads at each end of belt, reaching up to and protecting the bases of the barbettes; a 2-inch armoured deck; the armour for the heavy gun turrets being 8-inch, and for the casemates 5-inch. In her general design, the new cruiser resembles the "Kaiser Karl VI." but she is somewhat better protected, carries two more 5·9-inch guns, and will have a knot more speed.

The new second-class battle-ship "Arpad" was launched on the 11th ult. from the San Marco Yard of the Stabilimento Tecnico Triestino, at Trieste. She is the second of the new division of battle-ships, of which the first, the "Hapsburg," was launched ten months ago. It is expected that the third vessel of this type will be completed before the end of next year. They form an addition to the effective strength of the fleet, in contradistinction to the other vessels now under construction, such as the cruiser E, described above, which are being built to replace ships still on the list. All three have a displacement of 8,340 tons, or nearly 1,500 tons more than the "Kronprinz Rudolf," which was previously the largest vessel of the fleet. They exceed the "Monarch" class, intended for coast defence, by 2,740 tons. Her dimensions are as follows :—Length, 354 feet; beam, 65 feet 9 inches; displacement, 8,340 tons, with an extreme draught of 23 feet. Protection is afforded by an armour belt of chrome-nickel steel 8·8 inches thick, reaching from 4 feet 4 inches below to 3 feet 6 inches above the water-line, and extending 63 per cent. of her length. Above the belt and reaching to the main or battery deck is a citadel protected by 4-inch armour, shut in by 8-inch athwartship bulkheads rising from the lower armour deck, which is 2·3 inches thick before the casemates, and 2·6 inches abaft. From the fore end of the armour belt to the ram the side is protected by 2-inch plating. A second armour-deck 1·8 inches thick extends from the top of the belt, while the main-deck between the fore and aft bulkheads is similarly protected, the combing of all the hatches being also armoured. There are two barbettes for the heavy guns, one forward and one aft, protected by 8·4-inch

armour, with ammunition tubes 7·2 inches thick; the secondary battery of 6-inch Q.F. guns will be mounted in double casemates, protected by 5·4-inch armour on the outer side and 3·3-inch on the inner side; the fore conning-tower will be protected by 8-inch armour, decreasing to 6 inches on the communication tube, the after tower will have 4-inch armour, decreasing to 2 inches on the communication tube. All the armour will be of chrome-nickel steel hardened by a special process and be provided by the great firm of Witkowitz & Co.

The armament will consist of three 24-centimetre (9·4-inch) 40-calibre guns, two being carried in the fore barbette and one in the after; twelve 15-centimetre (5·9-inch) 40-calibre Q.F. guns, six each side mounted in double casemates, one over the other; ten 6-pounder and twelve 1-pounder Q.F. guns, with eight machine guns. The guns and ammunition hoists will be worked by either electricity or hand while the ammunition tubes lead direct from the guns to the magazines, and it is calculated that by means of the electric hoists eight rounds a minute can be supplied. The axial height of the guns in the lower battery is 14 feet 8 inches above the water, in the upper battery 21 feet 4 inches and that of the barbette guns 25 feet and 24 feet 4 inches fore and aft respectively. There will be two submerged torpedo-discharges for 18-inch Whitehead torpedoes. The heavy 24-centimetre (9·4-inch) guns are supplied by Krupp, but all the others are manufactured by the Skoda firm at Pilsen.

The ship will have twin-screws, and the engines are to develop 11,900-I.H.P., which, with 136 revolutions, is to give a speed of 18·5 knots, steam being supplied by sixteen water-tube boilers on the Belleville system. The coal stowage will be for 840 tons. Electricity will be used for lighting the ship, working the guns, barbettes, ammunition hoists, ventilators, etc., the current being supplied by six dynamos, producing three-phase currents and under armour protection.

The new third-class cruiser "Szigetvár," a sister ship to the "Zenta" and "Aspern," is now nearly completed. She is 301 feet 10 inches long, with a beam of 39 feet 6 inches, a displacement of 2,350 tons, and a draught of 14 feet 2 inches. Her armament will consist of eight 12-centimetre (4·7-inch) Q.F. Skoda 40-calibre guns, ten 6-pounder Q.F. guns, two machine guns and two submerged tubes for 18-inch torpedoes. The 4·7-inch guns are in sponsons protected by 2-inch steel armour, the conning-tower being similarly protected. The engines are to develop 8,000-I.H.P., to give a speed of 20·5 knots; steam being provided by Yarrow water-tube boilers. The coal supply is 250 tons, which at 12 knots speed will give a radius of action of 3,500 miles. She and her sisters are wood-sheathed.

Medical Health Report for the Navy for the Years 1898-99.—The last report, which appears every two years, is interesting. It contains much useful information, and bears testimony to the good work accomplished by the Medical Staff of the Navy, and also to the conscientious carrying out of the sanitary measures prescribed by the authorities. There are also interesting and instructive statistical tables of comparison with other Navies.

The number of cases of sickness was 547 per 1,000 in 1898, and 467 per 1,000 in 1899, which is lower than the mean for the previous ten years, which was 643·3 per 1,000, and only a third of what it was twenty-five years ago (1,641·3 per 1,000 in 1875).

Owing to improved sanitary arrangements and the increased use of quinine, the cases of malaria have been decreased to 28 and 33 per 1,000, while thirty years ago at Pola alone the percentage was as great as 800 per 1,000.

Ophthalmia, which at one time was very common, attaining to the proportions of an epidemic in some ships, has now almost completely disappeared. Scurvy also is now practically unknown, there having been only three light cases during the last ten years.

Small-pox, thanks to the strictness with which vaccination is now carried out, has fallen from 0·49 to 0·2 per 1,000. During the last twenty years tuberculosis has sensibly decreased, in a great measure from the care now taken in entering recruits, the number of cases in the last report being 3 per 1,000.

Veneral diseases show a diminution of from 104 per 1,000 in 1879 to 90 per 1,000 in present report; this number, however, is higher than in the Army, where it has been reduced to 60 per 1,000.

The only malady which seems now to be endemic to Pola, and which becomes from time to time an epidemic (the last was in 1896-97) is typhus. The following are the principal sanitary measures which have been taken to combat this disease :—1. Securing to every quarter of the town a sufficient quantity of pure water, and forbidding the use of suspected sources of supply. 2. The establishment of a central system of canals, and the removal of all refuse outside the town. 3. The creation of a central market subject to a rigorous supervision.

The bacteriological laboratory at the Naval Hospital have made some interesting studies, which show that live oysters can carry for three weeks the bacilli of virulent typhus, and thus easily become a source of infection. Another experiment has shown that wine kills the typhus bacillus : wine infected with bacilli of virulent typhus has in twenty-four hours rendered them innocuous.

The report shows also that the establishment ten years ago by the Admiralty of a dental institute has been extremely valuable, and the work done reflects great credit on the naval doctors who direct the establishment.—*Mittheilungen aus dem Gebiete des Seewesens.*

FRANCE.—The following are the principal appointments which have been made : Rear-Admirals—C. L. T. Courrejolles to the command of the Algerian Naval Division ; J. T. Pélhau to command of a division in the Squadron of the North. Capitaines de Vaisseau—G. Paupie to “Melpomène” ; J. L. H. Le Pord to “Bruix” ; De Geis de Guyon de Pampelonne to “Chateaurenault” ; P. Auvert to “Bouvines.” Capitaines de Frégate—P. H. Delanelle to “Saint-Barbe” and command of *Défense-Mobile* at Dunkirk ; E. A. Papaix to “Galilée.”—*Le Journal Officiel de la République Française.*

Rear-Admiral Pélhau, who succeeds Rear-Admiral Mallarmé, will hoist his flag on the coast-defence battle-ship “Bouvines,” and will have for his Chief of the Staff Capitaine de Frégate Caron, on the coast-defence battle-ship squadron becoming the 2nd Division of the Northern Fleet.

The first-class armoured cruiser “Amiral-Charner” and the first-class cruiser “Guichen” are under orders to return home from China, the first-named to Toulon, and the second to Brest. No date has as yet been fixed for their departure.

During the recent manoeuvres several ships of the Mediterranean Squadron were tentatively fitted with wireless telegraphic apparatus, with which experimental signalling was carried on. A special commission is now sitting to collate the results obtained and to consider how to improve this method of communication between ships. On land at Toulon an analogous commission is sitting and considering the results obtained in communicating with the squadron from that harbour. This commission will also report on the points along the coast most suitable for installing stations, and it has been already decided to have one on the Isle of Porquerolles.

The changes foreshadowed as likely to be made in the constitution of the Mediterranean and Northern Squadrons have now been carried into effect. Vice-Admiral de Maigret, Commander-in-Chief of the Mediterranean Squadron has consequently re-organised his ships as follows :—

First Division.

First-class battle-ships—“Saint Louis” (flag-ship of Commander-in-Chief), “Charlemagne,” “Gaulois.”

Second Division.

First-class battle-ships—“Charles-Martel” (flag-ship of Second-in-Command), “Jauréguiberry,” “Bouvet.”

Reserve Division.

First-class battle-ships—“Brennus” (flag-ship of Rear-Admiral), “Carnot.”

Second-class battle-ships—“Hoche,” “Amiral-Baudin.”

Light Squadron—First Division.

First-class armoured cruisers—“Pothuau” (flag-ship of Rear-Admiral), “Latouche-Tréville,” “Chanzy.”

Second Division.

Second-class cruisers—"Du Chayla," "Cassard."

Third Division.

Third-class cruisers—"Galilée," "Linois."

Fourth Division.

Cruiser-destroyers—"Dunois," "La Hire."

Destroyer-flotilla—"Pique," "Espingole," "Épée," "Hallebarde," "Flibustier."

The Squadron of the North, under Vice-Admiral Ménard, is now constituted as follows:—

First Division.

First-class battle-ship—"Masséna" (flag-ship of Commander-in-Chief).

Second-class battle-ships—"Formidable," "Courbet."

Second Division.

Coast-defence battle-ships—"Bouvines" (flag-ship of Rear-Admiral), "Tréhouart," "Jemappes," "Valmy."

Light Division.

First-class armoured cruisers—"Bruix" (flag-ship of Rear-Admiral), "Dupuy de Lôme."

Second-class cruiser—"D'Assas."

Third-class cruiser—"Surcouf."

Destroyers—"Fauconneau," "Cassini," "Yatagan," "Durandal."

The Northern Squadron left Toulon for its station on 4th August, with the exception of the cruisers "Dupuy de Lôme," "D'Assas," and "Surcouf," detailed to convey M. Saint-Réné de Taillandier, the French Minister at Morocco, to his post. After disembarking the Minister at Tangier, these three vessels joined Admiral Ménard's squadron at sea and proceeded to Brest. The Northern Squadron afterwards took part in the Grand Manœuvres in the Charente directed by General Brugère, and executed a landing in force at Palice. They have since proceeded to Quiberon Bay for target practice, returning to Brest to re-victual, and are now in readiness to proceed to Dunkirk for the naval review before the Tsar, being reinforced by the 2nd Division of the Mediterranean Squadron, under the command of Rear-Admiral Aubry de la Noë, consisting of the first-class battle-ships "Charles Martel," "Jauréguiberry," and "Bouvet," with the third-class cruiser "Galilée."

The Mediterranean Squadron left Toulon on 6th August for the general inspection, which took place in the Gulf of Juan. On leaving again for Toulon, target practice with the light guns was carried out at the condemned torpedo-boat No. 104. Each ship fired one round from each of her 14-centimetre (5·5-inch) guns, and the target was sunk in 10 minutes.

The armoured gun-boat "Phlégéthon," on trial at Cherbourg on 2nd August, had to return to the arsenal on account of leaky tubes. After repairs she had a further trial, which being pronounced satisfactory, she has left for Bizerta, where she is to be stationed.

Steam Trials.—The new first-class battle-ship "Iéna" has concluded her trials at Brest satisfactorily. During a six hours' run with the engines developing 9,000-I.H.P., a mean speed of 16 knots was maintained; all the 20 boilers were afloat, and there was a consumption of coal of 100 kilogrammes for each square metre of grate surface. At the two hours' full-speed trial the engines developed 16,500-I.H.P., 1,000-H.P. over the contract, making 125 revolutions and giving a speed of 18·2 knots, with a coal consumption of 135 kilogrammes per square metre of grate surface, and 779 grammes per I.H.P. per hour.

The new first-class armoured cruiser "Jeanne d'Arc" has commenced her trials off Toulon, but the results have not been satisfactory. The ship is intended to go 23 knots, with 1,400 tons of coal, her normal supply, in her bunkers; but up to the present

although carrying less coal, a speed of 18 knots only has been reached, as the bearings have become hot when the engines have been run up to 110 revolutions, although at full speed they are supposed to make 120 revolutions; moreover, serious defects have developed in the feeding of the boilers, which are of the small-tube Guyot type, and the temperature of the stokeholds is so high that they are quite unbearable. On a recent trial with 24 boilers alight out of 30, fires had to be drawn in no less than 20; and with only 4 boilers working the ship had to crawl back to Toulon at 3 knots. A special enquiry is to be held, and it is even stated that her boilers may have to be removed and others of a different type substituted.

The new first-class cruiser "Chateaurenault" has also been continuing her trials: during an hour and a half's run under forced draught the engines developed 23,200 I.H.P., making 129 revolutions and giving a speed of 23.3 knots with the wind and 24.2 knots against. As in the "Jeanne d'Arc," however, the heat in the stokeholds is so great that they are practically uninhabitable when all the fires are alight, and the authorities at present seem unable to devise any satisfactory arrangement for remedying this grave state of things, while hot bearings have also given a great deal of trouble, and it is now proposed to substitute steel for bronze, a change which will take from 4 to 5 months to effect.

The new torpilleur-de-haute-mer "Siroco" has completed her trials at Cherbourg: at full speed, with the engines making 355 revolutions, she maintained a speed of 28.3, which is more than 2 knots over the contract; with one boiler she attained a speed of 20 knots during a three hours' trial. A sister ship, the "Mistral," maintained a speed of 28.1 during her full-speed trial, which is also a trifle over 2 knots above the contract speed, and with one boiler only can steam 20 knots; although not so powerfully armed as the English destroyers, they are really more trustworthy vessels at sea, as they are much more strongly built. Another vessel of the same type, the "Simoun," built at Havre by the Forges et Chantiers de la Méditerranée, has made 26 knots at her preliminary trials; while a fourth, the "Trombe," at Lorient, has maintained a speed of 26.6 knots, being .6 over the contract. A fifth of the class, the "Tramontaine," has commenced her trials at Rochefort: at a three hours' trial, the engines, making 290 revolutions, gave a speed of 23 knots, and during an hour's run at full speed, with the engines making 339 revolutions, a maximum speed of 29.8 knots was attained. These so-called torpilleurs-de-haute-mer are really small torpedo-boat destroyers, and have their engines and boilers protected by 1-inch armour of hard steel, with transverse bulkheads fore and aft of the same thickness. They are said to be much stronger built than the new 300-ton destroyers of the "Durandal" type.

New Ships and Dockyard Notes.

Cherbourg.—The coast-defence battle-ship "Requin" which has been undergoing extensive repairs and alterations, has made a trial of her machinery alongside the yard, which has not proved satisfactory, as the engines did not work smoothly; her new boilers are of the Niclausse type. The coast-defence battle-ship "Valmy" has been experimenting with a new method of loading and firing her 13.3-inch turret guns, the invention of Major Guye, of the Marine Artillery: the results have been very successful, five rounds having been fired in four minutes, a higher rate of firing than has been ever before obtained from guns of so heavy a calibre, and which will materially increase the fighting value of these coast-defence ships.

Seven torpedo-boats of the *Défense-Mobile* have been mobilised and sent to Dunkirk, to strengthen the *Défense-Mobile* of that port, on the occasion of the visit of the Tsar.

It has been decided that the new first-class armoured cruisers "Amiral-Aube" and "Desaix," which are being built at St. Nazaire, and the "Kléber" under construction at Bordeaux, are to be sent to this port to carry out their trials, instead of to Brest, as was originally intended. The "Desaix," which is the most advanced, should be delivered by the contractors at the end of 1902; the "Kléber" during the first quarter of 1903, and the "Amiral-Aube" sometime during the summer of 1903. The reason

for the change is that Brest has already in hand several new ships, and to send more there would only cause unnecessary delay. A commencement has been made in the yard here with the new armoured-cruiser "Jules Ferry."

Brest.—Official instructions have been received at Brest for the construction in 1902 of armoured cruiser "G 14," which will take later the name of "Thiers" or "Lamartine." Her length will be 479 feet; beam, 70·2 feet; displacement, 12,550 tons; and she will have three sets of engines, which are to develop 27,500 I.H.P.; speed, 22 knots. She will carry four 7·64-inch guns in two turrets, one forward and one aft, sixteen 6·4-inch guns, twelve in pairs in turrets and four in casemates; twenty-two 1·85-inch guns, and five torpedo-tubes, two submerged. Her water-line armour belt will be 6·7 inches in thickness and above will be a thinner belt of 2·2-inch armour extending to the upper deck. She will have two armour decks, the lower of which will be 2·56 inches in thickness. Her complement will be 38 officers and 690 men, and her cost £1,160,000.

Lorient.—Good progress is being made with the new first-class armoured cruiser "Amiral-Gueydon," whose engines have been tried satisfactorily alongside the yard: her two 19·4-centimetre (7·6-inch) guns have also been placed in position, one forward and one aft, in the barbette-turrets, which are a new feature in these ships. Work is also progressing with the new armoured cruiser "Condé," but the idea of having her ready for launching in six months has been given up, as there are not sufficient workmen to put on her, in view of the necessity of pushing to completion the "Amiral-Gueydon" and her sister ship the "Gloire," as well as the first-class protected cruiser "Jurien de la Gravière," which last-named ship is now to carry out her trials at this port, instead of proceeding to Brest, as had been previously arranged.

The "Gloire," is well advanced, and it is hoped she will be able to begin her trials after the departure of the "Jurien de la Gravière," and the "Gueydon," that is to say in about six months' time.

Orders have been received at the yard to prepare plans for a new armoured cruiser of a somewhat similar type to the "Léon Gambetta," which has been recently commenced at Brest. The new ship will be laid down on the slip where the "Condé" is building, as soon as that ship is launched. The contractors will take the opportunity afforded by the delay in launching the "Condé" to put her 28 Niclausse boilers on board before she leaves the slip, and they have already commenced work.

Toulon.—The new torpedo-boat destroyer "Epée" has arrived here from Cherbourg and joined the Active Squadron of the Mediterranean Fleet. The new first-class armoured cruiser "Montcalm" commissioned on the 22nd July, with reduced complement for her trials. She is the first of the new type of armoured cruisers to be ready for her trials, the other two sister ships being the "Amiral-Gueydon" now completing at Lorient, and the "Dupetit-Thouars" recently launched at Toulon. The "Montcalm" has been built and engined by the Forges et Chantiers de la Méditerranée, at La Seyne.

The Forges et Chantiers de la Méditerranée, at La Seyne, have secured the contract for the new first-class battle-ship of 14,862 tons displacement, the construction of which is provided for in this year's Estimates. She is to be called the "Patrie," and her sister ship the "République" will be laid down at Brest at the end of the year.—*Le Yacht, La Marine Française, and Le Temps.*

ITALY.—The following are the principal appointments which have been made: Vice-Admirals—G. Piumbo to command of the Mediterranean Fleet; E. Gualterio to be Vice-President of the Superior Naval Council; G. Mirabello to Command of 3rd Maritime Prefecture (Tarentum). Rear-Admirals—G. Bettolo to command of Training Division; R. Resasco to be Second-in-Command of Mediterranean Fleet; C. Marchese to be President of the Standing Experimental Committee; C. Grillo to be Director-General of Naval Ordnance; C. Farina to be Inspector-General of Torpedo-boat Flotilla; C. Reynaldi to be Director-General of the *Personnel* of the Fleet; G. Annovazzi to be Director-General of Artillery.

The following is the constitution of the different squadrons at present :—
Mediterranean Fleet.

- First-class battle-ships—"Lepanto" (flag-ship of Commander-in-Chief), "Sardegna," "Sicilia," "Dandolo" (flag-ship of Second-in-Command), "Andrea Doria," "Morosini."
- First-class armoured cruisers—"Garibaldi," "Varese," "Carlo Alberto."
- Torpedo-cruisers—"Euridice," "Partenope."
- Destroyers—"Lampo," "Dardo," "Strale," "Fulmine."
- Tank-vessel—"Tevere."

Cruising Squadron.

- First-class armoured cruiser—"Vettor Pisani" (flag-ship of Rear-Admiral Candiani, commanding).
- Second-class torpedo-cruisers—"Fieramosca," "Stromboli," "Vesuvio," "Elba."
- This squadron, which has been reduced by two cruisers, is still in China.

Torpedo-boat Inspection.

- The flotillas and torpedo-establishments under Rear-Admiral Farina, who flies his flag in the first-class despatch-vessel "Rapido," remain unchanged.

Training Squadron.

- Corvette-cruisers—"Vespucci" (flag-ship of Rear-Admiral Bettolo in command), "Flavio Gioia."
- First-class gun-boat—"Curtatone."
- This squadron was reconstituted in the spring.

In the Red Sea.

- Corvette-cruiser—"Cristoforo-Colombo."
- First-class gun-boats—"Voluturno," "Governo."

On special service in Australia.

- Second-class torpedo-cruiser—"Paglia."

On special service in America.

- Second-class torpedo-cruiser—"Umbria."

In the Levant.

- First-class despatch-vessel—"Archimede," with "Sesia," as stationaire at Constantinople.

The torpedo-boats attached to the different *Défenses-Mobiles* are as follows :—

- Spezia—Nos. 18, 22, 25, 29, 31, 32, 36, 38, 44, 45, 46, 52, 53, 57.
- Maddalena—Nos. 72, 73, 74, 75, 80, 81, 82, 83, 84, 85, 86, 87, 112, 113, 114, 115, 116, 117.
- Taranto—Nos. 26, 27, 28, 33, 39, 40, 41, 42, 43, 47, 48, 49, 50, 51, 54, 55, 56, 58.
- Venezia—Nos. 1, 2, 23, 30, 34, 35, 37, 59.
- Messina—Nos. 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141.—*Gazzetta Ufficiale.*

The first-class armoured cruiser "Marco Polo" and the second-class torpedo-cruiser "Lombardia" are under orders to proceed to China to relieve the first-class armoured cruiser "Vettor-Pisani" and the second-class torpedo-cruiser "Elba."

Strength of the Personnel.—There are at the present time on the Active List of the Navy :—1 admiral, 7 vice-admirals, 14 rear-admirals, 58 captains, 70 frigate-captains, 75 corvette-captains, 410 lieutenants, 160 sub-lieutenants, and 110 midshipmen. The Engineering Staff consists of :—1 inspector-general of naval engineers, 2 inspectors, 7 directors, 9 chief engineers 1st Class, 11 chief engineers 2nd Class, 17 engineers 1st Class, 15 engineers 2nd Class, 8 assistant-engineers 1st Class, 12 assistant-engineers 2nd Class, 1 inspector-general of officer-mechanics, 2 directors, 5 principal chief officer-mechanics 1st Class, 20 principal chief officer-mechanics 2nd Class, 70 chief officer-mechanics, 103 chief officer-mechanics 2nd Class, 62 chief officer-mechanics 3rd Class. The Medical Department consists of :—1 inspector, 6 directors, 11 chief surgeons 1st Class, 23 chief surgeons 2nd Class, 75 surgeons 1st Class, and 63 surgeons 2nd Class. The Commissariat Branch consists of :—1 inspector, 6 directors, 17 chief paymasters

1st Class, 26 chief paymasters 2nd Class, 107 paymasters 1st Class, 107 paymasters 2nd Class, 28 assistant-paymasters. There are 30 captains, 54 lieutenants, and 57 sub-lieutenants attached to the Corpo Reale Equipaggi, the men of which are enlisted voluntarily and from whose ranks are drawn the quartermasters, seamen-gunners, trained torpedo-men, mechanics, sick-berth attendants, etc.

The strength of the Seamen Personnel is 22,496 men, made up of 3,969 petty officers, 17,152 seamen, stokers, etc., 677 boys, and 700 specialists. The seamen number 7,651, exclusive of 536 quartermasters and trained helmsmen, seamen-gunners and torpedo-men 5,006, artificers 1,146, and stokers 4,149. The men are divided into two classes, 18,352 being available for service afloat, and 4,144 for shore duty.

New Ship.—The first-class battle-ship "Regina Margherita," which was launched at Spezia on 30th May, is the most powerful ship yet built for the Italian Navy. Her principal dimensions are :—Length, 426 feet 6 inches ; beam, 78 feet : draught, 27 feet 4 inches ; displacement, 13,426 tons. The two triple-expansion engines, fed by 28 Niclausse water-tube boilers, calculated to develop 19,000-I.H.P. with forced, and 16,000-I.H.P. with natural draught, are expected to develop a speed between 19 and 20 knots. The extreme coal capacity is 2,000 tons, the bunkers being arranged longitudinally, as an additional protection to the vital parts of the vessel. The hull consists of 5,000 tons of soft steel, wood being entirely excluded. The thickness of the armoured belt varies from 4 to 6 inches, the armour of the barbettes being 8 inches, with 8-inch hoods for the guns, and that of the armoured deck 3 inches. Along the water-line, however, the conjunction of the armoured deck with the belt gives a thickness of nearly 9 inches. The principal armament consists of four 12-inch guns in barbettes situated one forward and one aft, and the secondary armament of four 8-inch, twelve 6-inch Q.F. guns, eighteen 3-inch Q.F. guns, and eight 3-pounders, with four machine guns. The vessel is also furnished with four torpedo-tubes, two of which will be submerged.

Steam Trials.—The new first-class battle-ship "Ammiraglio di Saint Bon" has made a very successful contractor's full-speed trial at forced draught off Spezia. With the engines making 104 revolutions a maximum speed of 19.2 knots was attained, which is rather more than a knot over the contract speed. The machinery was constructed by the Ansaldo firm at Genoa.

The following are the details of the trials of the new first-class battle-ship "Emanuele Filiberto" ; the ship, which has a displacement of 9,800 tons, is 344 feet 6 inches long, with a beam of 69 feet 4 inches, and a mean draught of 24 feet 9 inches. Her twin-screw engines are of the ordinary vertical triple-expansion type, in two separate engine-rooms ; the boilers, of the cylindrical type, being placed six before and six abaft the machinery. According to the contract the engines were to develop 9,000-I.H.P. under natural draught during a six hours' run ; and under forced draught during 1½ hours' run they were to develop 13,500-I.H.P., making 112 revolutions. The screws are four-bladed Griffith's, and the total weight of engines and boilers, with water in the latter ready for steaming, is 1,253 tons, giving 93 kilogrammes for each I.H.P. At the six hours' natural-draught trial the mean power developed was 9,981, nearly 1,000 in excess of contract, the engines making 94 revolutions, giving a speed of 16.8 knots ; during the full-speed trial which was held three months later, although the engines developed 13,630-I.H.P., the engines only made 97.7 revolutions, giving a speed of 17 knots, or more than a knot under the guaranteed speed. The ship's bottom was very foul at the time, but this did not account for the unsatisfactory working of the engines.

The new torpedo-avisos "Agordat" has completed her trials at Naples. The ship was built at the Royal Dockyard at Castellamare, her dimensions being as follows :—Length, 287 feet 6 inches ; beam, 30 feet 6 inches ; displacement, 1,313 tons with a mean draught of 11 feet 11 inches. Her armament consists of four 4.7-inch Q.F. guns, eight 6-pounder Q.F. guns, with two 3-pounders and two torpedo-tubes. Her engines, which drive two Griffith screws, according to the contract were to develop 4,400-I.H.P. under natural draught, with a coal consumption not to exceed 900 grammes per H.P. per hour, and to develop 7,500-I.H.P. under forced draught for three hours. At her natural-draught trial the engines developed 4,670-I.H.P., the engines making 190

revolutions and giving a speed of 18·8 knots; at the full-speed forced-draught trial the engines developed 8,550-L.H.P., making 232 revolutions and giving a mean speed of 22·2 knots, the maximum speed attained being 23 knots. Steam is provided by eight water-tube boilers of the Blechynden type, which work at a pressure of 200 lbs. to the square inch; the boilers are in two groups of four each in separate stokeholds, with a funnel for each group. The total grate surface is 140 square feet, the total heating surface being 6,628 square feet. The total weight of the engines and boilers is 285 tons.

Submarine Boat Trials.—A number of successful trials have been carried out with the submarine boat "Delfino." The "Delfino" was built at Spezia in 1896, and several successful series of experiments were carried out with her, but in one of her dips she fouled the "Maria Pia's" bottom, and could not be cleared until the battleship weighed and shifted berth. After this her trials were given up, but they were re-commenced a short time ago. She is constructed of steel in the form of a cigar, is about 72 feet long, with a diameter of 8 feet 6 inches; when completely immersed she has a displacement of about 107 tons. The motive power is furnished by a battery of 300 accumulators, which give her a speed of from 8 to 9 knots on the surface of the water. She is driven by a screw, there being two small screws in addition for submerging her or sending her to the surface. She carries two torpedo-tubes forward. The provision of air is sufficient for twelve men for seven or eight hours. The cost of the "Delfino" is 300,000 lire (£12,000). The "Delfino" is to be fitted with a new periscope, the invention of two engineers in the Royal Navy—Signori Russo and Laurenti. The new instrument is called the cleptoscope, and it is claimed for it that, while the tube, which is visible above the water, is only 5 inches in diameter, it has a field of view of 60°, which is without distortion, and extends to the horizon. The original French periscope has only a field of 3° or 4°, and with it it is extremely difficult to locate objects, while in the latest pattern the tube is over 13 inches in diameter, while the objects in the field are said to appear blurred and distorted.—*Rivista Marittima, Italia Militare e Marina, and Mittheilungen aus dem Gebiete des Seewesens.*

The Estimates for 1900-1901.—The total amount of the Estimates for the current year amount to 122,174,671 lire (£4,886,986 17s.), as against 115,425,818 lire (£4,617,033 18s.) for 1900, being an increase of 6,748,823 lire (£269,552 18s.). This sum includes 5,156,000 lire (£206,240) for pensions, and a Vote of 14,215,746 lire (£568,629 17s.) for the Mercantile Marine, which is almost double the amount voted for the same purpose last year. Some of the other principal items are as follows:—

| | Lire. | £ | s. |
|--|------------|----------|-------------|
| General expenses, including the cost of the Ministry of Marine | 1,327,922 | = | (53,116 18) |
| For maintenance of ships in commission, in reserve, and <i>en disponibilité</i> | 6,000,000 | (240,000 | 0) |
| Pay of executive officers | 3,243,200 | (129,728 | 0) |
| .. of engineers and mechanics | 1,325,000 | (53,000 | 0) |
| .. of accountant branch | 900,000 | (36,000 | 0) |
| .. of medical branch | 671,410 | (26,856 | 8) |
| .. of men | 12,000,000 | (480,000 | 0) |
| .. of civil technical <i>personnel</i> | 1,345,400 | (53,816 | 0) |
| Semaphore and carrier-pigeon service | 410,000 | (16,400 | 0) |
| Provisions, etc. | 7,650,000 | (306,000 | 0) |
| Coal, etc. | 3,800,000 | (152,000 | 0) |
| Hydrographical service | 288,312 | (11,532 | 0) |
| Material for repair of fleet | 12,260,000 | (490,400 | 0) |
| Cost of labour for repair of fleet | 5,790,000 | (231,600 | 0) |
| Guns and armament | 2,200,000 | (88,000 | 0) |
| Cost of labour in connection with guns, etc. | 2,223,025 | (88,921 | 0) |
| New ships | 24,000,000 | (960,000 | 0) |
| The principal items of the Extraordinary Budget are:— | | | |
| New constructions | 500,000 | (20,000 | 0) |
| Coast defences | 200,000 | (8,000 | 0) |
| Fortifications and armament of Maddalena | 200,000 | (8,000 | 0) |
| Purchase of mobile torpedoes | 500,000 | (20,000 | 0) |

The expenses of the Ministry of Marine have been decreased by 72,000 lire (£2,880); the cost of the maintenance of ships in commission, etc., is decreased by 201,000 lire (£8,000). The cadre of officers is increased by 10 lieutenants and diminished by 6 midshipmen and 10 cadets. The number of men remains fixed at 24,500, but steps have been taken to increase the number of petty officers, which, however, can only be done gradually.

The following ships have been added to the effective strength of the fleet, or will be during the year :—

First-class battle-ships—"Emanuele Filiberto," "Ammiraglio Saint-Bon."

First-class armoured cruisers—"Varese," "Giuseppe-Garibaldi."

Second-class cruiser—"Puglia."

Torpedo-cruisers—"Agordat," "Coatit."

Torpedo-boat destroyers—"Aquilone," "Borea," "Dardo," "Freccia," "Lampo,"

"Nembo," "Strale," "Turbine," "Euro," "Ostro."

Cistern-ship—"Bormida."

The following ships have been struck off the effective list :—"Città-di-Genova," "Diligente," "Vigilante."

The following table shows the state of advancement, the cost, and approximate date of completion of ships under construction :—

| Type. | Name. | Under construction at | Date of completion. | Cost. | Amount voted in present Estimates. | State of construction expressed in twentieths. |
|--------------------------------------|---------------------|-----------------------|---------------------|------------|------------------------------------|--|
| First-class battle-ships | Benedetto-Brin ... | Castellamare ... | 1905-06 | 29,964,000 | 7,546,330 | 6 |
| | Regina-Margherita | Spezia | — | 29,875,000 | 7,379,895 | 6 |
| | Emanuele-Filiberto | Naples | 1900-01 | 22,151,847 | 876,000 | 17 |
| First-class armoured cruisers | Francesco-Ferruccio | Venise | 1903-04 | 15,545,862 | 4,776,078 | 9 |
| | Giuseppe-Garibaldi | Genes (Ansaldo) ... | — | 15,913,144 | 414,240 | finished |
| | Varese | Livourne (Orlando) | — | 15,936,144 | 804,534 | — |
| Torpedo-avisos | Agordat | Naples | — | 3,113,058 | 23,000 | — |
| | Coatit | " | — | 3,113,058 | 19,000 | — |
| | Dardo | Elbing (Schichau). | — | 1,161,025 | 184,900 | — |
| Torpedo-boat destroyers | Strale | " | 1900-01 | 1,161,025 | 208,334 | 19 |
| | Ostro | " | — | 1,262,325 | 260,434 | 18 |
| | Euro | " | — | 1,262,325 | 260,434 | 17 |
| Tugs | Nembo | Naples (Pattison) | — | 1,227,325 | 297,000 | finished |
| | Turbine | " | 1900-01 | 1,227,325 | 320,434 | 17 |
| | Aquilone | " | — | 1,227,325 | 320,434 | 14 |
| Cistern-ship | Borea | " | — | 1,227,325 | 320,434 | 11 |
| | Atlante | " | — | 933,092 | 333,092 | 10 |
| | 21 | Venise (Layet) ... | — | 115,809 | 55,809 | 8 |
| Tugs | 21 | Chioggia (Poli) ... | — | 115,809 | 55,809 | 6 |
| | — | Venise (Vianello)... | — | 103,809 | 43,809 | 9 |
| Total | | | | | 24,500,000 | |

—Stato di Previsione della Spesa del Ministero della Marina.

MILITARY NOTES.

PRINCIPAL APPOINTMENTS AND PROMOTIONS FOR AUGUST, 1901.

Major-General Sir E. R. Elles, K.C.B., R.A., to command a First-Class District in India. Major-General J. H. Wodehouse, C.B., C.M.G., R.A., to be a First-Class District Commander in India. Colonel H. R. Viscount Downe, C.B., C.I.E., from h.p. to be (temporarily) a Brigadier-General on the Staff to command the Cavalry Brigade at the Curragh, and to have the temporary rank of Brigadier-General whilst so employed. Lieut.-Colonel F. S. C. Hare, A.S.C., to be Colonel. Lieut.-Colonel H. L. Jessep, R.E., to be Colonel. Surgeon-General W. Taylor, M.D., C.B., P.M.O. in India, to be Honorary Physician to the King. Lieut.-Colonel and Brevet Colonel H. C. Selater, A.A.G. for R.A., South Africa, to be a Colonel on the Staff. Lieut.-Colonel S. H. Harrison, h.p., to be Colonel. Major-General C. Strahan, Royal (late Bengal) Engineers, to be Lieut.-General. Major (local Lieut.-Colonel) G. V. Kemball, R.A., is granted the local rank of Brigadier-General whilst employed as Inspector-General of the West African Frontier Force.

AUSTRIA-HUNGARY.—One of the last numbers of the *Verordnungsblatt* published a table showing the new organisation of the Landwehr and the Landsturm in the Landwehr territorial zones of Graz, Cracow, Przemsyl, and Innsbruck; it also gave the organic dispositions of the Landsturm district commands, and finally the enumeration of the Landwehr infantry brigades and divisions. Organised as it is at present, the Austrian Landwehr constitutes one of the essential elements of the whole of the military forces of that country, and may be placed as regards education, armament, and general state of preparedness on the same level as the Line.

The re-organisation of the Austro-Hungarian Landwehr, commenced four years ago, will be completed on 1st October next, by which date the last units to be raised will be formed. In its main lines the organisation is precisely similar to that of the Regular Army. All the various Services are centralised in the Minister of War. There is a commander-in-chief at Vienna, 15 commanders of Landwehr territorial zones, acting as army corps commanders, 8 infantry divisional commanders, and 16 infantry brigadiers. Each division is composed, in peace-time, of 2 Landwehr brigades of 2 to 3 regiments each, in all 4 to 5 regiments with 12 to 15 battalions. In the event of mobilisation and at the peace manoeuvres of large units, the Landwehr divisions are placed under the higher commands notified in general orders. The Landwehr infantry is composed of 36 ordinary and 2 rifle regiments, which are called after the headquarters of their Staffs and numbered consecutively. Each regiment is made up of Staff, 3 field battalions of 4 companies each, and a cadre reserve corps per battalion, with the exception of the 23rd Zara Regiment, which has 4 field battalions. In all, the Landwehr infantry consists of 115 field battalions divided into 460 companies. The peace effective of a regiment of 3 battalions and of the corps of reserve cadres is 52 officers and 664 men. The war effective is 45 officers and 634 men.

The Landwehr mounted troops consists of 6 Uhlan regiments, a division of Tyrolese light cavalry, and a squadron of Dalmatian light cavalry. In peace-time it is composed of a regimental staff with a cadre pioneer troop, 2 divisional staffs, 6 field squadrons, and a cadre reserve corps. The peace effective is 29 officers, 285 men, and 239 horses; the war effective is 208 men.

The Tyrolese Light Cavalry Division, whose great utility in mountainous country was demonstrated in the 1899 Grand Manœuvres in Carinthia, is composed of a divisional staff, 2 field squadrons, and a cadre reserve corps. The peace effective is 13 officers, 109 men, and 92 horses; the war effective is 92 men.

The squadron of Dalmatian light cavalry has a peace strength of 3 officers, 42 men, and 34 horses, its war strength being 29 men. The total peace effective of the Austrian Landwehr may be reckoned in round numbers at 2,100 officers, 30,000 men, and 1,500 horses.

The Hungarian Landwehr, which consists of 23 infantry regiments divided into 94 battalions, and 10 cavalry regiments of 60 squadrons, has a total effective of 2,300 officers, 25,000 men, and 3,800 horses in round numbers.

In comparison it may be mentioned that the total effective of the combined Austro-Hungarian Army is estimated at 14,394 officers, 281,654 men, 57,596 horses, and 1,018 guns.—*Revue Militaire Suisse*.

BELGIUM.—The contingent for 1901 has been distributed as follows amongst the various corps of the Army :—

| | | | |
|--------------------------|-----------------------|--------|-------|
| Infantry | Line Regiments | 6,546 | 8,994 |
| | Riflemen | 1,404 | |
| | Grenadiers | 468 | |
| | Carabineers | 576 | |
| Cavalry | Light Cavalry | 304 | 1,218 |
| | Guides | 304 | |
| | Lancers | 610 | |
| Artillery | Field | 800 | 2,190 |
| | Fortress | 1,345 | |
| | Pontoon | 45 | |
| Engineers | ... | ... | 526 |
| Transport | ... | ... | 132 |
| Administration Battalion | ... | ... | 240 |
| Total | | 13,300 | |

—*Revue Militaire*.

BULGARIA.—The Bulgarian Army, although the youngest, is by no means the most inferior of European Armies : it may, on the contrary, be regarded as one of the best organised amongst those of the second-rate Powers. It is, in fact, but little older than the Principality herself, for one may assign its origin to the battalions of Bulgarian volunteers organised in 1877, by the Russian staff, at first to the number of six, before the outbreak of war, and afterwards increased to twelve during the campaign. These battalions were, above all, meant for garrison duty in their own country, but the greater part of them took an active part in the operations. Since that time the military organisation of the Principality has continued to improve, and to-day Bulgaria, like France, gives military instruction to the greater proportion of her population. Every Bulgarian, who is physically fit for service, is obliged to pass at least six months with the colours. This limited service is obligatory for all young men hitherto dispensed with as supporters of families, as well as for those who are in excess of the contingent to be enrolled.

The normal period of service is for two years in the infantry, and three in the other branches of the Service, this latter prolongation being compensated for by a corresponding decrease in the time passed in the reserve. Young men who possess a certificate of superior education only pass one year with the colours. The total period of military obligation is for twenty-five years, of which ten are passed in the Regular Army and its reserve, seven in the Reserve Army, and eight years in the Militia.

The Regular Army, whose peace effective is about 35,000 men, is formed into six divisions, each of which corresponds to a territorial district. Each division consists of 2 brigades of 2 regiments of infantry of 2 battalions, 1 regiment of field artillery of 3 groups of 3 batteries, 1 cavalry regiment of 4 or 5 squadrons, and 1 transport company, making in all 24 infantry regiments, 6 field artillery regiments, and 5 cavalry regiments with a total of 22 squadrons, the 6th regiment not having yet been formed. To each infantry brigade is attached a reserve regiment, composed of 5 companies, plus a frontier company. Besides these divisions there are 3 pioneer battalions of 4 companies, 2 technical engineer companies (pontoon and railway), 1 telegraph park, 3 fortress

artillery battalions of 3 companies each, 1 mountain artillery regiment of 9 batteries, a Guards' squadron, and the permanent garrison of Silistria composed of 1 infantry regiment of 6 companies, and a pioneer company.

On mobilisation, the infantry companies are doubled so as to make up the regiments to 4 battalions. The Reserve Army is composed of units of all arms corresponding in general to those of the Regular Army. The Militia only mobilises infantry battalions.

The Bulgarians have all the qualities of good soldiers: provided their chiefs are kind and just, they yield readily to discipline and easily endure fatigue. The officers have all the same origin, viz., the Military School at Sofia, to which is shortly to be added a Military College, where pupils will be admitted at 13 years of age. Some officers complete their instruction in foreign schools and even in foreign Armies, and it is naturally to Russia that most of them go.

There existed up to the present year, at Sofia, an instruction company of non-commissioned officers. It is about to be done away with and replaced by a preparatory school for reserve officers. Young men will be admitted to it who are called out to fulfil their military obligations, and who possess a certificate of higher or secondary education. The course at this school will be for eleven months.

The instruction of the troops is carried out with much care. As much as possible troops of the various areas assemble together for frequent drills. In summer, in most of the garrisons, the regiments leave their barracks and go into camp, where officers and men lead an open-air existence. Since 1892, the Bulgarian infantry has been armed with the Austrian 8-millimetre magazine rifle. Trials have been proceeding for some years with a view to replacing the Krupp field guns now in use in the artillery by Q F. guns.

There exist in Bulgaria a certain number of forts dating from the Turkish occupation, the chief of these are Silistria on the Danube, and Choumla. In addition, since the war with Servia, Sofia has been surrounded by a line of works of a semi-permanent character; this species of fortification has also been carried out at Slivnitsa, to the west of the capital, and at Belogradtchik, to the north-west of the country, on the Servian frontier.—*Précis from Le Journal des Sciences Militaires.*

FRANCE.—The *France Militaire* publishes some particulars of the embarkation and disembarkation of troops on the west coast of France. There were three transports, the "Atlantique" and "Méléc," which called at Brest, and the "France," which called at Lorient. At Brest the troops were all assembled at 7.30 a.m. on 27th August, but were kept waiting until 11 before the embarkation began, when they marched on to the ships over two gangways 65½ feet long and 13½ feet wide. The embarkation at Lorient took place on the evening of the same day. The "Atlantique" took on board 92 officers and 2,350 men; the "Méléc" 64 officers, 1,250 men, 700 horses, and 12 field guns; the "France" 82 officers, 2,200 men, and 37 horses—in all 6,038 troops, 737 horses, and 12 guns. The transports were convoyed, not only by the Northern Squadron, consisting of the battle-ships "Masséna," "Courbet," and "Formidable," the coast-defence ships "Jemappes," "Valmy," and "Bouvines," the cruisers "Dupuy de Lôme," "D'Assas," and "Bruix," the torpedo-boat destroyers "Cassini" and "Surcouf," and the sea-going torpedo-boats "Fauconneau," "Durandal," and "Yatagan," but also by a division of the Mediterranean Squadron, consisting of the battle-ships "Charles Martel," "Bouvet," and "Jauréguiberry," and the unprotected cruiser "Galilée."

In the opinion of the correspondent of the *France Militaire*, the semblance of real warfare was not maintained, as on approaching La Rochelle the ships went so close to some of the forts that the machine-guns of these could easily have cleared the crowded decks of the transports, leaving out of account the damage the heavy guns could have wrought on the shipping. The ships arrived at their destination on 29th August at 8.45 a.m., when the tide was too low for the disembarkation to take place; but later, about 11, it began, the men from the "Atlantique" crowding into all the available

boats. The boats were towed near the shore by the launches of the war-ships, and eventually the crews jumped into the water and placed boards from the boats to the beach, so that the troops could land dry-footed. This they did, but were so crowded that in real war they would have been at the mercy of the troops who were there to meet them. The boats made two trips, each of about 20 minutes' duration. With regard to the other two transports, they were able after some two hours to reach the quays at La Pallice, where the men scrambled ashore. The horses, however, had to be lifted one by one by means of cranes and landed on sacks of hay placed to receive them. This was a slow process, as the landing of each horse took from two to two and a half minutes. Only one horse was injured, and it had to be killed. The troops landed were to take part in the manoeuvres on shore which, as already announced, were to last until 8th September.

GERMANY.—The *Militär-Wochenblatt* publishes a summary of the veterinary medical report of the Prussian Army for 1900. The total number of service horses was 81,039, and of these 32,996, or 40·71 per cent., came under treatment, with the result that 30,399, or 92·12 per cent., of the treated horses were cured, 320 were declared unfit for further service, 1,148, or 3·48 per cent., died, and 368 or 1·11 per cent. were killed, making a total loss to the Service of 1,836 horses, or 5·58 per cent. of the horses treated, and 2·26 per cent. of the total strength. Compared with the previous year there was an increase of 6,416 in the number of cases treated and of 284 of the number lost. Deaths from glanders were more numerous than in the two years next preceding, the figures being 13 in 1898, one only in 1899, and 52 in 1900. Of the 52, 47 cases came from one regiment, but in 21 of these cases there was some doubt as to the real nature of the disease. Chest murrain affected 1,618 horses, of which 1,498 were cured, 70 died, one was killed, and 49 remained under treatment. No less than 1,019 cases with 43 deaths occurred in the first quarter of the year. The cases were less numerous than in either of the four preceding years, the numbers for these years being 2,277, 3,116, 3,265, and 2,301. The far less dangerous red murrain or intestinal fever showed a great increase in the number of cases, the figures being 4,325 for 1900, and only 861 for 1899, but only one horse died from this disease, and one was shot. Colic was, as usual, much more fatal, as out of 3,746 horses treated, 528 horses died, both these numbers being higher than those of any of the five preceding years. Inflammation of the throat and larynx affected 527 horses, but only one died: 420 of the cases were infectious, and 284 of these came from one regiment. The number of cases treated for saddle and harness galls was 596, against 440 in 1899. The number of cases of inflammation of the tendons also showed an increase, it being 4,030, with a loss of 39 horses. The hot-iron treatment, which at one time was common in these cases, is now very exceptional, cold-water bandages and other cooling treatment with massage being substituted for it. The general increase in the numbers treated for the various complaints is attributed chiefly to the greater amount of work the horses were called upon to do.

Danzer's Armee-Zeitung states that the Prussian General Staff is collecting material for a full historical account of the German expedition to China; and in connection with this, General Schlieffen, of the General Staff, has issued the following circular:—“The official material already available is in itself abundant for the purpose of writing later a technical account of the expedition to China. The extraordinary circumstances, however, which gave rise to the expedition and moved the whole nation to take a passionate interest in it make it desirable that the collection of materials should not be confined to those derived from official sources, but should include private information furnished by persons of every rank and class who took part in the expedition. The value of such private information increases as time rolls on, as has been proved in many historical instances, and may prove to be beyond all price to future generations. Possessors of letters, diaries, and other materials relating to the expedition are asked to entrust them to the General Staff, who will be responsible for their proper preservation in the military archives, where they will be kept secret for thirty years, save to

members of the General Staff who may be appointed to refer to them for official purposes. By this regulation it is hoped to overcome any objection there might be to hand over documents which contain sharp criticisms or hasty expressions of opinion written possibly in moments of anger or under painful circumstances."—*Times*.

In the recently issued German draft of regulations for the construction of batteries a sharp distinction is made between the cover to be provided for guns in fortified positions and for those employed in regular fortress warfare. At the same time, principles are recognised as common to both cases. Briefly summarised, these may be stated as follows: First, considerations connected with the provision of cover are never to be allowed to delay the opening of fire; secondly, protection from hostile fire is to be provided in the first place for the *personnel*, afterwards for the *matériel*; and finally, the arrangements are always to be such as will allow of a subsequent extension and improvement of the cover without interfering with the fire of the guns. It follows, therefore, that cover should be obtained in the first place, by utilising the formation of the ground; artificial protection being employed only to supplement natural cover. For batteries in the field, and also for many of the less exposed batteries in siege operations, the new regulations lay down that protection shall only be provided against the splinters of shell, and that, therefore, parapets of from 3 to 7 feet in thickness will suffice; but for the more exposed batteries in fortress warfare, covering masses of 13 to 15 feet thick must be provided, and also bombproof shelter for the men. As a rule, the guns in these batteries are to be 40 to 50 feet apart, though when the space available is insufficient, the intervals may be reduced to 25 feet, and the attainment of inconspicuousness of the guns is in every case to be studied.—*U.S. Army and Navy Journal*.

A Ministerial decision of 31st March, 1901, lays down the following rules for the organisation of the working and administration of military railways:—

1. *Authorities charged with the Supervision and Administration.*

The military railway is directed and administered by the Imperial Management of Military Railways, which has its headquarters at Berlin. This management is taken from the commandant of the Railway Brigade, who is himself placed under the authority of the Inspector of the Troops of Communications. As regards the working, the management is bound to observe the laws and regulations in force on the Prussian railways, and to conform to the advice of the competent managing functionaries, especially as regards the safety of the working. From an administrative point of view the military railway is under the Minister of War.

2. *Personnel.*

The director of the Military Railway is a field officer with the rank of regimental commander. He has a staff that includes an adjutant and a paymaster. The executive *personnel* is made up from the working section, which is composed of 3 companies commanded by a captain, who is the head of that Service. The officers are nominated by the Emperor; they form, under the authority of the director of military railways, a corps of officers with its own court of honour. The director selects his adjutant from amongst the officers of the working section. Non-commissioned officers, re-engaged men, and lance-corporals, with the exception of hospital orderlies, are promoted to superior rank by the director; they are put to their various employments by the commandant of the working section or by company commanders. The working section receives no man who is a recruit. The railway regiments pass on to that section the necessary number of lance-corporals and men, the latter being selected from men who have finished their instruction. Vacancies which occur in the working section during the course of the year are filled from the railway regiments, according to certain rules and in conformity with detailed orders from the commandant of the Railway Brigade. Each year, on the liberation of the class, the working section should receive 426 men who are finishing their first year of service, that is to say, 355 men from the 1st and

3rd Regiments and from the 1st Battalion of the 2nd Regiment, in the proportion of 71 from each battalion, 36 men from the two Prussian companies of the 2nd Battalion 2nd Regiment, 36 men from the two Saxon companies of the same battalion. At the same time the working section discharges on furlough (*Beurlaubtenstand*) a similar number of lance-corporals and men. The section is attached as a battalion to the 2nd Railway Regiment.

3. *Powers of the Director.*

The director has under his authority the whole of the military railway service, as regards the working, maintenance, and administration. On his own initiative, or with the approval of his military superiors, he gives all orders, regulations, etc. He signs the correspondence and represents the management in all external matters. He decides all debatable questions with regard to the Military Railway and approves contracts passed by the working section. He exercises towards non-commissioned officers and men the powers of a regimental commander as regards minor jurisdiction, disciplinary punishments, passes, etc. He exercises constant personal supervision over the technical instruction of the *personnel* placed under his orders, and endeavours in every way to develop their intelligence. When absent on short leave he is replaced by the senior officer of the working section; for absences of longer duration he may be replaced by an officer nominated by the Emperor.

4. *Powers of the Chief of the Working Section.*

The chief of the working section directs the whole of that service, under the instructions of the director and with the help of the four captains of that section. Under certain limitations he regulates all current matters concerning the working of the Military Railway. He personally conducts the correspondence of the working section with the railway functionaries of similar standing, with contractors, with the public, etc. He is personally responsible for the safety, order, and economy of the working, as well as for the carrying out of the service by the military *personnel*. As regards passes and punishments, he has the powers of a battalion commander. In case of necessity he is replaced by an officer appointed by the director.

5. *Powers of the Chief Inspector of the Working Section.*

He has under his authority the control of the rolling stock, the inspection of telegraphs, the administration of the dépôt and of the printing office.

6. *Powers of Company Commanders.*

They direct and supervise the carrying out of the service within the limits assigned to them.

7. *Accountant Duties*

are carried out by the senior paymaster in the working section; he acts according to regulations as regards the payment of troops, but he has to take into account the rules and regulations in force for Prussian railways belonging to the State.—*Revue Militaire*.

GREECE.—The conditions of service in the Greek Army are much the same as those which obtained in the French in 1872, except that the time spent with the colours, for the first portion of the contingent, is legally two years. This period is frequently reduced in practice either for pecuniary or political motives. The state of the finances has also frequently caused a reduction in the periods of instruction for men of the second portion of the contingent and for the Reservists. Shortly before the last war the effectives were so reduced that the number of troops barely sufficed for guard duties, and instruction was almost entirely suspended.

The officers are obtained either from the Military School of *Eretrpedes*, or from the School for Non-commissioned Officers; the latter, however, only furnishes sub-lieutenants to the infantry and cavalry. The entire absence of age limit in the first place, and afterwards to its having been fixed at a too advanced age, have had the effect of rendering the corps of officers antiquated and of checking promotion. The Regular Army

consisted, before the Græco-Turkish war, of 8 battalions of *erzonoi* (*εἰζωνοί*), a species of riflemen, who wore the national costume; 10 infantry regiments of 2 battalions and a cadre battalion (3 battalions on a war footing); 3 cavalry regiments of 4 squadrons; 3 artillery regiments, consisting in all of 20 batteries, of which 11 were field and 9 mountain; an engineer regiment of 8 companies with an additional telegraph and a firemen company.

This organisation has been maintained since the return to a peace footing, whilst schemes for re-organisation are being elaborated, one of which is to call in the aid of foreign instructors. It was only at the beginning of this year that a law has been passed, according to which the Greek Army is formed into 3 divisions, having their headquarters at Athens, Larissa, and Missolonghi, and each consisting of 2 brigades of 2 infantry regiments, 1 battalion of *erzonoi*, 1 regiment of cavalry, and 1 regiment of artillery. Thus it appears that the number of the units is practically the same as before. Five battalions of *erzonoi*, however, may be grouped to form 2 regiments, so as to complete the number of infantry regiments to 12.

A law of September, 1900, has re-organised the chief command of the Army, at the head of which is placed the Crown Prince. The Commander-in-Chief, however, remains subordinate to the Minister of War, who keeps all administrative questions under his direct supervision.

The war *matériel* leaves much to be desired, especially as regards quantity. The artillery possesses Krupp guns, but the infantry is still armed with the Gras rifle, although the adoption of a repeating rifle has been for some time in contemplation. The want of horses and provisions of all kinds was, as everyone knows, the cause of grave embarrassment to the Greeks during the last campaign.

Finally, in spite of the terrible lesson of 1897, Greece has made but little progress in military organisation during these last few years, and her Army is in no way superior, either morally or in the matter of armament, to what it was before the war with Turkey.

MONTENEGRO.—The military organisation of Montenegro presents a most perfect example of a nation armed. In case of need every sound inhabitant from 15 to 55 years of age takes his arms and ammunition and joins the chief of his village or district, who becomes a military chief. The women even join in the defence of the country by carrying food and ammunition to the combatants. The Principality is reckoned to contain about 43,000 men capable of bearing arms. The organisation provided in time of war consists of:—1. 52 infantry battalions, of from 5 to 8 companies each on an average, which are irregularly divided into 8 brigades. 2. An artillery battery for each brigade. The battalions, companies, and batteries are each year assembled for a few days. For some years, however, they have begun to introduce a little more regularity into this primitive system, and in 1896 a battalion and battery, for instructional purposes, were formed, in which young men, on drawing lots, had to pass in the infantry 4 and in the artillery 6 months. The number of men thus exercised is about 1,300 annually. On account of the sparse population of Montenegro, its Army can only have a defensive significance, and it admirably fulfils this object. The configuration of the country and the bravery of the inhabitants make up for want of military instruction. Behind rocks, where each man conceals himself and aims at leisure, tactical science plays but a minor rôle. The whole history of Montenegro, her stubborn resistance five times in the last century to the efforts of the Ottoman armies, render eloquent testimony to the valour of the inhabitants of this little Principality.—*Précis from Le Journal des Sciences Militaires.*

RUSSIA.—A recent order of the Minister of War has modified the cavalry dépôt organisation. This dépôt was divided into nine brigades—one for the Guards, and the other eight for the rest of the Army. Each of these brigades consisted, that of the Guards of 3 cadres, and the other eight of 2 cadres, with the exception of the 7th, which had 3. These cadres were numbered from 1 to 17, and were each attached to a

cavalry division. There was also a *dépôt* cadre for the cavalry division of the Caucasus. Each of these cadres was again sub-divided into three sections, each corresponding to one of the three Regular regiments of the cavalry division. There was no *dépôt* for the Cossack regiments, as the men bring their own horses with them. In war-time each cadre furnished a certain number of service squadrons. In peace-time it trained and furnished the remounts for the division.

The change adopted consists in forming *dépôt* squadrons from the *dépôt* sections, and to group them in regiments which will in their turn take their place in the brigades. Thus there will be formed :—

1. With the cadres Nos. 1, 2, and 3 of the Guards Cavalry *dépôt*, a *dépôt* regiment of Guards Cavalry of 6 squadrons.
2. With the Army *dépôt* cadres numbered from 1 to 17, 7 *dépôt* regiments of cavalry of 6 squadrons and 1 regiment of 9 squadrons; the regiments thus formed will take the number of the brigade from which they were constituted.
3. With the Caucasian cavalry *dépôt* cadre a cavalry group of 3 squadrons.

The *dépôt* regiments Nos. 2, 4, and 6 will form the 1st *Dépôt* Cavalry Brigade, the regiments Nos. 1, 3, and 7 the 2nd Brigade, the regiments Nos. 5 and 8 and the Caucasian group the 3rd Brigade, whose headquarters will be at Kharkow. The staffs and brigades at present existing will be disbanded. The *dépôt* regiment of Guards Cavalry, which is not brigaded, is placed under the orders of the commander of the 2nd Guards Cavalry Division. The 1st Regiment, which is quartered in the Kazan military district, remains under the orders of the commandant of that district, but through the medium of the commander of the 2nd Cavalry Brigade. In war-time the *dépôt* regiments will provide service squadrons.—*La France Militaire*.

SERVIA.—For some time the Servian was a species of semi-permanent Army, only consisting, on a peace footing, of a cadre of very weak strength, meant to develop on mobilisation to receive reservists. Each permanent infantry company thus became, on a war footing, a battalion of 4 companies, each battalion a regiment of 4 battalions; similar transformations occurred in other branches of the Service. Since 1893 successive creations have notably increased the number of the permanent units, thus diminishing the difference between the peace and the war footing. In consequence the Servian Army now finds itself, in this respect, in the same situation as the neighbouring Balkan States. The duration of military obligation is longer in Servia than in almost any of the other States. It extends for 25 years (from 20 to 45 years of age) in the National Army, and for 8 years (from 17 to 20 and from 45 to 50) in the last Levy.

The National Army is divided into 3 levies. The 1st Levy, which consists of the permanent cadre (the Regular Army) and its reserve, is composed of men of from 20 to 31 years. Those from 31 to 37 belong to the 2nd Levy, and those from 37 to 45 to the 3rd. The period of service with the colours is for 2 years in the cavalry and artillery, and for 1½ years in all the other branches of the Service. But it is reduced to 14 months for infantry recruits who, at the end of that time, have acquired a sufficient military knowledge, and to 6 months for young men with diplomas and for those whose presence is essential, if not absolutely indispensable, for their families. Supporters of families are entirely exempt from service with the colours.

Servian officers are drawn either from the non-commissioned ranks or from the Military Academy at Belgrade. This Academy includes an inferior course, meant for the recruiting of non-commissioned officers for all branches of the Service, and a higher course for the preparation of officers for the Staff. In order to obtain promotion to the rank of sub-lieutenant, a non-commissioned officer must have followed 6 courses of instruction at college, have passed satisfactorily a qualifying examination, and be admitted by the officers of the regiment to which he aspires to belong. The various

arms each possesses a school for the training of non-commissioned officers, and to which young men may go who are desirous of obtaining that rank. A course at these schools is, however, by no means necessary in order to become a non-commissioned officer.

The country is divided into 5 divisional districts, amongst which the units of the different levies are equally distributed. The permanent cadre consisted, in 1900, for each division, of an infantry brigade of 3 regiments of 4 battalions each, an artillery regiment of 3 groups of 3 batteries each, a transport squadron, and a hospital company, and in addition to the divisions, 4 regiments of cavalry of 4 squadrons (1 regiment being the Life Guards), a horse artillery battery, a fortress artillery regiment of 2 battalions of 4 companies each, 2 engineer battalions (one of which has 5 pioneer and the other 3 technical companies, viz., miners, railway, and telegraph), and a half pontoon battalion of 2 companies.

In two of the artillery regiments the third group is composed of 3 mountain batteries. The 4 cavalry regiments form a division of 2 brigades, to which is attached the horse artillery battery.

One may judge of the progress accomplished by Serbia, in the way of military organisation, by remembering that in 1895 the Servian infantry only consisted of 5 regiments of 4 battalions, or 20 battalions in all, one third of the present number. According to a decree of the 3rd March, 1901, the 60 infantry battalions at present existing were to be grouped into 30 regiments of 2 battalions each forming 15 brigades, 3 brigades making up a division. On a war footing the 30 infantry regiments will be made up to 4 active battalions, and 1 battalion in reserve, the mountain batteries will be detached from the regiments to which they belong and replaced in those regiments by field batteries of new formation, the cavalry (in addition to the independent division on a peace footing, mentioned above) will mobilise a regiment of 3 squadrons for each infantry division. Previously, however, the 2nd Levy should mobilise units of all arms corresponding almost exactly to those of the 1st Levy; but the new organisation having, rightly, considerably increased the importance of the forces of the first line, has consequently decreased those of the 2nd and 3rd Levies, which are now only able to furnish a limited number of infantry, cavalry, artillery, etc.

Servia has recently adopted the Mauser repeating rifle, with 7-millimetre calibre and magazine containing 5 cartridges, for the infantry. The artillery is armed with guns of the de Bangé system.—*Précis from Le Journal des Sciences Militaires.*

CORRESPONDENCE.

WOLFE AND TOWNSHEND.

To the Editor of the JOURNAL OF THE ROYAL UNITED SERVICE INSTITUTION.

23rd August, 1901.

SIR,—In the notice of the military life of Lord Townshend in your August number the reviewer says :—

"Colonel Townshend prints two valuable original documents (pp. 203-206) which prove that after the grave disaster at the Montmorency River Wolfe took his three brigadiers into his confidence; that they all three were against Wolfe's plan of attacking the French on the Beauport side, and suggested the plan for taking Quebec, which Wolfe adopted with such signal success." I think it can be shown that there is a misconception here, and that there is no reason for handing over the finest feather in Wolfe's cap to Townshend.

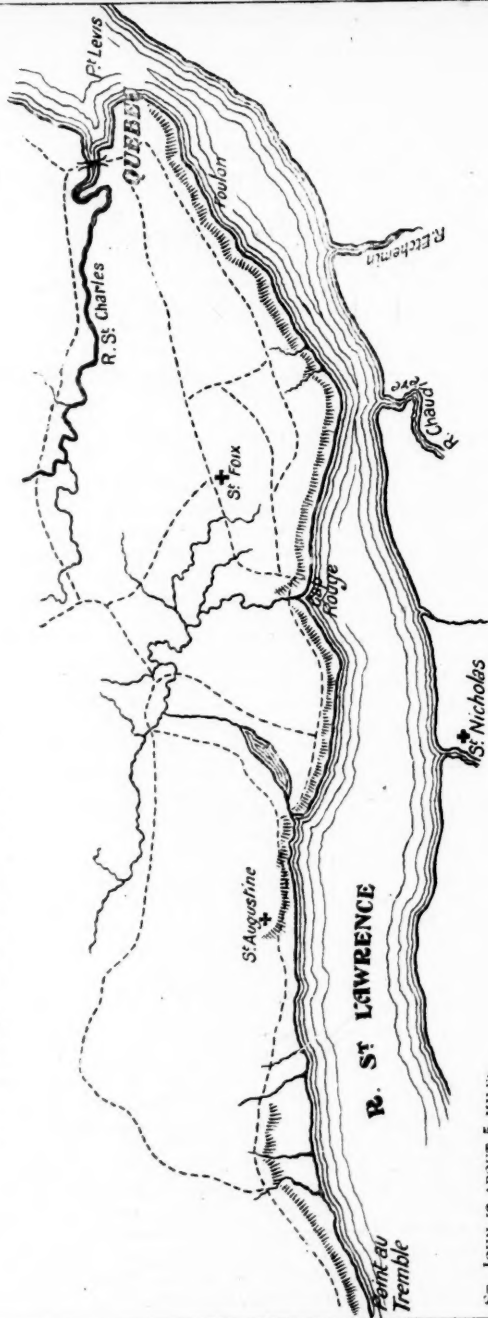
The plan which the brigadiers suggested, and which is said to have originated with Townshend, was to effect a landing on the north bank of the St. Lawrence, from eight to twenty miles above Quebec. They say :—"It may be done anywhere for an extent of four leagues, viz., from the height of St. John to Cap Rouge river. Two attempts may be made, either of which succeeding is sufficient." It was a thing that could be done without difficulty or loss, and they argued that, once they were established there, Montcalm must fight them on their own terms, as he would be cut off from his supplies and from the French army which was opposing Amherst.

Wolfe had consulted the brigadiers because his own health had utterly broken down. He was not convinced by their reasoning, but he acquiesced. As he wrote to Admiral Saunders on the 30th August :—"My ill state of health hinders me from executing my own plan; it is of too desperate a nature to order others to execute." The troops were sent up the river to the number of 3,600 men, and on the 8th September, orders were issued for a landing on the north bank in accordance with the proposal of the brigadiers. Five battalions were to be thrown ashore near Cap Rouge, while a feint at Point au Tremble, ten miles higher up, drew off the enemy's attention. But continuous rain on the 8th and 9th caused the landing to be put off.

Wolfe was not hopeful of it. He wrote to the Secretary of State (Lord Holderness) on the 9th :—"I am so far recovered as to do business, but my constitution is entirely ruined, without the consolation of having done any considerable service to the State, or without any prospect of it."¹ Why he did not share the sanguine anticipations of the brigadiers, we are not told. But it is far from clear that a landing above Cap Rouge would have obliged Montcalm to abandon his defensive tactics. He had only to hold out for a few weeks more, and the British expedition must leave the St. Lawrence. If the British after landing, moved down the north bank on Quebec, they must cross the Cap Rouge river, and make their way through the woods and swamps of which Townshend speaks in his despatch of the 20th. Bougainville who had been sent up the

¹ Colonel Townshend is mistaken in supposing (p. 219) that it was this letter which caused general despondency in England: it was Wolfe's despatch of the 2nd September. A letter of this kind was not for publication.

(From a survey by Major Holland in 1769)



ST. JOHN IS ABOUT 5 MILES
ABOVE POINT AU TREMBLE.

0 1 2 3 4 5 nautical miles

river to oppose a landing, could have delayed them long enough in this tangled country to allow Montcalm to bring all his troops together, outnumbering the 3,600 British by perhaps three to one. Wolfe's doubts seem quite intelligible.

The delay caused by bad weather gave him time to choose a very different landing-place, the *Anse du Foulon*, only a mile and a half above the town. On the 10th he examined it carefully from a hill on the south side of the St. Lawrence, in company with Monckton, Townshend, and Admiral Holmes. Major Mackellar, the chief engineer, who was of the party, has described it :—"The bank which runs along the shore is very steep and woody, and was thought so impracticable by the French themselves that they had then only a single picket to defend it. This picket, which we supposed might be about 100 men, was encamped upon the top of a narrow path which runs up from the shore ; this path was broke by the enemy themselves, but about 200 yards to the right there appeared to be a slope in the bank, which was thought might answer the purpose. These circumstances, and the distance of the place from succours, seemed to promise a fair chance of success."

Here Wolfe made his venture on the morning of the 13th, and we all know how it succeeded. While Bougainville was looking out for him ten miles higher up, and Montcalm was detained in his camp at Beauport by a naval demonstration, Wolfe placed upon the plains of Abraham, not only the 3,600 men whom he had had with him up the river, but also 900 more from Port Levis. Montcalm was forced to fight him on open ground, with troops only equal in number and very inferior in quality ; and the fate of Quebec was sealed.

The result was brilliant, but the stroke was a bold one and might easily have proved a failure. Whether the risk was worth running is fair matter for argument ; but right or wrong, the merit or the blame of the decision must rest on Wolfe. Colonel Townshend, borrowing the phrase of a pamphleteer, tells us that Wolfe "put into happy execution the plan of others." But if a French battalion had been on the heights above Foulon, as is said to have been intended, or if by any other chance the attempt had failed, perhaps disastrously, would the brigadiers have admitted that this was an execution of their plan ? Their plan was to land on a much easier shore at a much greater distance from Quebec.

The fact is that, even after Wolfe's victory and death, they were at first more disposed to criticise his plan than to claim it for their own. Admiral Holmes, writing on the 17th, says of Wolfe's selection of Foulon as the landing-place, instead of landing about four leagues above the town :—"This alteration of the plan of operations was not, I believe, approved of by many beside himself. It had been proposed to him a month before when the first ships passed the town, and when it was entirely defenceless and unguarded ; but Montmorency was then his favourite scheme, and he rejected it. He now laid hold of it when it was highly improbable he should succeed from every circumstance that had happened since."

Similarly Murray wrote on the 5th October to Townshend, who was sailing for England :—"I have no copy of the paper I sent by you to General Wolfe concerning his scheme of landing between Point au Tremble and St. Augustin, but the public orders are a sufficient proof of his intention to do it, and likewise of the suddenness of the thought of landing when [where ?] we did. Indeed, his orders throughout the campaign show little stability, stratagem, or fixed resolution."

On 12th September, when Wolfe had issued his final orders, the three brigadiers sent him a joint letter :—

"As we do not think ourselves sufficiently informed of the several parts which may fall to our share in the execution of the Descent you intend to-morrow, we must beg leave to request from you as distinct orders as the nature of the thing will admit of, particularly [as] to the place or places we are to attack. This circumstance (perhaps very decisive) we cannot learn from the public orders."

Wolfe replied in a letter to Monckton, the senior brigadier :—

"My reason for desiring the Honor of your company with me to Gorham's post yesterday was to shew you, as well as the distance would permit, the situation of the

enemy, and the place where I meant they should be attacked. As you are charged with that duty, I should be glad to give you all further light and assistance in my power. The place is called the *Foulon*, distant upon 2 miles, or $2\frac{1}{2}$ from Quebec, where you remember an encampment of 12 or 13 tents and an abbatis below it. You mentioned to-day that you had perceived a breastwork there, which made me imagine you as well acquainted with the place as the nature of the thing would admit of. . . . It is not a usual thing to point out in the public orders the direct spot of our attack, nor for any inferior officers not charged with a particular duty to ask instructions upon that point. I had the Honor to inform you to-day that it is my duty to attack the French army. To the best of my knowledge and abilities I have fixed upon that spot where we can act with the most force and are most likely to succeed. If I am mistaken, I am sorry for it, and must be answerable to His Majesty and the public for the consequence."

To Townshend, Wolfe wrote :—

"General Monckton is charged with the first landing and attack at the Foulon ; if he succeeds you will be pleased to give directions that the troops afloat be set on shore with the utmost expedition, as they are under your command, and when 3,600 men now in the fleet are landed I have no manner of doubt but that we are able to fight and to beat the French army, in which I know you will give your best assistance."¹

There is certainly nothing in this correspondence to suggest that "the unexpected and surprising manner in which Quebec was taken was the plan of the brigadiers, and not of Wolfe," as Colonel Townshend puts it. On the contrary, Burke was fully justified in writing of Wolfe, as he did in the *Annual Register* for 1759 :—"At last, singly and alone in opinion, he formed and executed that great, that dangerous, yet necessary plan, which drew out the French to their defeat."

I am, Sir,

Your obedient servant,

E. M. LLOYD,

Lieut.-Colonel.

NAVAL AND MILITARY CALENDAR.

AUGUST, 1901.

- 1st (Th.) Lord Kitchener reported that some British scouts were murdered by the Boers at Doorn River, Orange River Colony, and that General Sir J. French had received a letter from Kritzingen stating that he intended to kill all natives in British employ, whether armed or not.
- " " A draft of the Government scheme for enhancing the efficiency of the Volunteer Force was issued as a Parliamentary Paper.
- 2nd (F.) The Colonial Secretary stated in the House of Commons that Lord Kitchener had been instructed to take more stringent measures in conducting the war, in view of the murder of British wounded and natives.
- " " 4th Bn. Royal Lancaster Regiment (Militia) arrived at Southampton from Cape Town on the "Idaho."

¹ By a singular inadvertence Colonel Townshend tacks the latter part of this letter on to the plan of the brigadiers, as if they were one and the same document (p. 208). Copies of the correspondence are in the Newcastle Papers ; for references see the article "Wolfe" in the *Dictionary of National Biography*.

- 2nd (F.) 3rd Bn. South Lancashire Regiment (Militia) arrived at Southampton from Cape Town on the "Pinemore."
- " " 2nd Bn. Royal Warwick Regiment arrived at Bermuda from Cape Town on the "Manila."
- 3rd (Sat.) Wreck of torpedo-boat destroyer "Viper" on Renouquet Rock, Channel Islands.
- " " Launch of first-class battle-ship "Imperator Alexander III." from the New Baltic Yard, St. Petersburg, for Russian Navy.
- 5th (M.) Her Imperial Majesty the Dowager Empress and Queen Frederick of Germany and Prussia, Princess Royal of Great Britain and Ireland, died at Friedrichshof, near Kronberg.
- 6th (T.) Indian frontier post at Kashmir Kar was surprised by Mahsuds, and several native British troops were killed and wounded.
- 8th (Th.) Lord Kitchener reported the surrender of De Villiers and 2 field cornets, also the capture by the Boers of a post of 25 of Steinacker's Horse on the Sabi River.
- 9th (F.) A White Paper was issued giving the terms of an important Proclamation by Lord Kitchener to the Boers, and demanding a surrender of the leaders by 15th September.
- 10th (Sat.) A British blockhouse was captured by the Boers at Brandfort.
- " " 4th Bn. South Staffordshire Regiment (Militia) arrived at Southampton from Cape Town on the "Lake Erie."
- 12th (M.) H.M. the King invested Count von Waldersee with the Military Grand Cross of the Bath at Homburg.
- 13th (T.) Launch of shallow-draught gun-boat "Moorhen" from Messrs. Yarrow's Works at Poplar.
- 15th (Th.) H.M.S. "Hermione" paid off at Malta.
- " " Kritzinger was defeated at Steynsburg by Colonel Gorringer.
- " " General Dixon's despatches on Vlakfontein were issued.
- 19th (M.) Launch of first-class battle-ship "Schwaben" (G) from Imperial Dockyard, Wilhelmshaven, for German Navy, by Queen of Württemberg.
- " " H.M.S. "Centurion" arrived at Portsmouth from China.
- " " A Boer laager near Bronkhorst Spruit was surprised by the British; 23 Boers were killed.
- 20th (T.) H.M.S. "Hazard" commissioned at Devonport.
- " " H.R.H. the Duke of Cornwall and York held a reception of Native Chiefs at Cape Town.
- 21st (W.) H.M.S. "Sappho" arrived at Sheerness from the Cape.
- 22nd (Th.) 70 British troops were captured north of Ladybrand.
- 24th (Sat.) The Boers attacked a British convoy between Kimberley and Griquatown, but were beaten off; 9 men were killed and 23 wounded of the 74th Company Imperial Yeomanry.
- 25th (S.) Lord Kitchener reported that Steyn, De Wet, and Botha had announced their intention of continuing the war in spite of his Proclamation.
- 28th (W.) The Secretary of State for War, after receiving further evidence of the murder of British troops by Boers, instructed Lord Kitchener to treat as guilty all members of commandoes proved to have been present at such outrages.
- 29th (Th.) H.M.S. "Bonaventure" paid off at Devonport.
- " " Launch of first-class armoured cruiser "Essex" at Pembroke.
- 31st (Sat.) Launch of first-class battle-ship "Exmouth" from Messrs. Laird's Yard Birkenhead.

- 31st (Sat.) Launch of first-class armoured cruiser "Bedford" from the Fairfield Yard, Glasgow.
- " " Lord Kitchener reported the capture of Piet Delarey, also the blowing up of a train by the Boers near Pretoria, when Lieut.-Colonel Vandeleur, Irish Guards, and 9 men were killed, and 17 men wounded.

Addendum to July Calendar.

- 27th (Sat.) Launch of first-class battle-ship "Maine" from Cramps' Yard, Philadelphia, for U.S. Navy.

FOREIGN PERIODICALS.

NAVAL.

ARGENTINE REPUBLIC.—*Boletín del Centro Naval*. Buenos Aires: June, 1901.—"Silvering Sextant Mirrors on board ship." "Servo-Motors" (*continued*). "Submarine Boats." "Naval Notes."

AUSTRIA-HUNGARY.—*Mittheilungen aus dem Gebiete des Seewesens*. No. 9. Pola: September, 1901.—"A Study on the Austro-Hungarian Mercantile Marine." "A Gunnery Criticism of the Double-Echelon System of Tactics." "The New U.S. 16-inch Gun for Coast Defence." "The Estimates for the Austro-Hungarian Navy for 1902." "Foreign Naval Notes."

BRAZIL.—*Revista Marítima Brasileira*. Rio de Janeiro: June and July, 1901.—Has not yet been received.

FRANCE.—*Revue Maritime*. Paris: July, 1901.—"Notes on the Wreck of the M.M. mail-steamer 'Irouaddy' and on the Operations for Re-floating her." "Our Ships of War and their Ancestors" (*continued*). "The Actual English Fleet and its Development during the Last Century." "A Naval Document of the Time of Louis XIII.: Squadron Orders of the Duke de Guise, Admiral of France, June, 1623." "Foreign Naval Notes." "The Mercantile Marine."

August, 1901.—"The Naval Operations in the Channel in 1779." "Chronicle of Lorient from 1792 to 1800." "Corlite and New Explosives." "Wireless Telegraphy." "Foreign Naval Notes." "The Mercantile Marine."

Le Yacht.—Paris: 3rd August, 1901.—"The Naval Manœuvres." "Yachting Notes." "Floating Docks." "The Mercantile Marine: French and Foreign." 10th August.—"The End of the Manœuvres." "Yachting Notes." 17th August.—"The New Submarines." "Yachting Notes." "The Turkish Navy." "The Mercantile Marine: French and Foreign." 24th August.—"The English Manœuvres of 1900." "Yachting Notes." 31st August.—"The New Arrangement of our Squadrons in European Waters." "Yachting Notes." "The Russian Battle-ship 'Peresviet.'" "The Mercantile Marine: French and Foreign."

Le Moniteur de la Flotte. Paris: 3rd August, 1901.—"The Naval Manœuvres." "The Montupet Boiler." 10th August.—"The Lesson of the Manœuvres." "The Naval Manœuvres." 17th August.—"The Defence of the Colonies." "List of New Constructions." "The Naval Manœuvres." "The English Naval Manœuvres." 24th August.—"Gibraltar." "The Tsar in France." "Chinese Affairs." 31st August.—"Turbine Vessels." "The Tsar in France." "Across the Mediterranean in a Balloon."

La Marine Française. Paris: 15th August, 1901.—"British Anxieties." "The Accident to the 'Jeanne d'Arc.'" "The French Naval Manœuvres of 1901." "The Question of the Boilers in England." "Proposed Unification of Linear Measures on Land and Sea."

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SPAIN.—*Revista General de Marina.* Madrid: September, 1901.—"Naval Résumé." "A Flying Squadron." "New English First-class Cruisers of the 'Leviathan' type." "Application of the Method of Interpolation in the Calculation of Deviation." "The French Naval Manœuvres of 1901." "The Presumed Cost of the French Navy in 1902." "The Cost of the Italian Navy." "Organisation of the Future Fleet." "Report on the Boats used in the Tunny Fisheries." "Calculation of the Luminous Power of Lighthouses" (*continued*). "The New French Armoured Cruisers 'Léon Gambetta,' 'Jules Ferry,' and 'Victor Hugo.'"

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NOTICES OF BOOKS.

The Art of Marching. By Colonel GEORGE A. FURSE, C.B., late Black Watch.

Colonel Furse's books are always interesting and always thorough. In this, his latest work on the military art, the author has put before us the results of his study of many campaigns and of his own personal experiences, for he has seen much of war, which bear on marches and the various duties in the field connected with this most important branch of the art of war. If we cannot agree with the author in his first chapter that marching comprises *all* the art of war (for if the troops are not well trained to shoot straight and to fight well, as the author himself in a later chapter acknowledges, it is of little use to bring them into action at the right time and place), we must still acknowledge that troops that cannot march are useless in the field, and we are glad to think that recent events have proved that the old saying that British troops cannot march no longer holds good.

Colonel Furse's book is far more than its title implies, for it includes many matters not strictly comprised under the term marching, such as outposts, bivouacs, camps, and cantonments, and is enriched in most cases with copious examples from military history. It is for this reason that we cordially recommend this instructive volume to the close study of the officers of the Army.

Chapter II. gives at length some of the most memorable marches in history. The author's researches extend from the marches of Xenophon (401 B.C.) and Hannibal across the Alps (218 B.C.) to the forced march of Colonel Mahon to the relief of Mafeking in 1900, and during that period few marches of note are omitted.

One chapter is devoted to Indian marches, which, from the author's personal experience during the Mutiny, is of special interest, and we are glad to see he appreciates at its true worth Sir Donald Stewart's march through an unknown country, where great difficulties of supply were met with, from Kandahar to Kabul, in 1880, the details of which he gives, and which, though not so famous as Sir F. Roberts's celebrated march from Kabul to Kandahar a little later, was extremely well arranged and conducted, and much facilitated the march of our present Commander-in-Chief. This he himself generously acknowledged.

The author mentions especially the marching of the Shropshires and C.I.V.'s, the Grenads, Queenslanders, and Canadians in South Africa.

The chapter on training for the march is full of interest. The Roman soldiers are said to have been trained to march $4\frac{1}{2}$ miles an hour, and in running drill, leaping, gymnastics, etc., including swimming, and the cavalry to have been taught to mount their horses without stirrups. The Roman foot-soldiers carried about 38 lbs. weight in addition to his arms and buckler. The French soldiers are equally highly trained now, and the author points out that the secret of success lies in the systematic training of the individual soldier. He says that the various exercises are taught him much too mechanically in our Service, and advocates marching the recruits a moderate distance at the conclusion of each drill. He complains that there is an absence of continuity in the training which is not obligatory on drilled soldiers. He attributes the success of the German soldier to the incessant efforts of the officers, and says our officers do not apply themselves to their profession, as the country has every reason to expect that they should, and that the love of sport, an excellent thing in itself, is overdone. He advocates more frequent marching *under service conditions* in large bodies for the training of the troops, and that valises be carried, but that all training should be carefully progressive, and every precaution taken to see that the men are well shod and their feet attended to. For the latter purpose company soldier-chiropractors would certainly be of great use. Colonel Furse's remarks on the boot question are the result of many years' experience in peace and war, and are well worth study.

A useful *précis* is given of things to be done in preparation for a march, and it shows the many matters that have to be weighed and considered beyond the mere marching arrangements. We are glad Colonel Furse lays stress upon the necessity for training the infantry in scouting. It is, of course, not to be expected that every man will make a good scout, but men with well-known qualifications for this are to be found in every battalion and should be carefully selected and specially trained.

He also wisely insists on each man carrying at least one day's provisions, as he never can tell where the fighting may carry him.

The author goes into the question of Orders a good deal, and gives in detail those issued by Napoleon for the passage of the Sambre in 1815. In these days similar orders would be issued, but more concisely. The directions in the new German "Felddienst-Ordnung" are a model of brevity and clearness.

The author enters at great length into the much debated question of Grouchy's march in following up the Prussians in the Waterloo campaign, into which our space will not admit of our following him.

He has chapters on the rate of marches, their length and arrangement, and in all cases quotes the opinion of well-known authorities, and in many gives examples from history, which are most useful. The rates for the different arms are given in detail, as in most books, while those of animals employed to carry or draw baggage in India are given from the regulations.

He recommends infantry marching by sections instead of by fours, and that an allowance of 25 per cent. be made for straggling. Of course this varies, but the regulation 20 per cent. seems sufficient with good discipline.

The chapters on the length of marches is well illustrated by examples. These include Stonewall Jackson's famous marches (from Colonel Henderson's book) and range from ancient times to General Gatacre's marches in the Soudan. They show that marching more than 13 or 14 miles a day with anything but a very small force is quite exceptional, and that at least one day in six has been a day of halt when possible.

Colonel Furse then takes us through that large question of cavalry reconnoitring, in front of an army, giving many examples from military history to show (again quoting chiefly from Colonel Henderson) that, though in the American War of Secession Stonewall Jackson revived by his masterly use of cavalry the methods of Napoleon 50 years before, yet in 1866 the Austrians and others, and in 1870 the French, quite forgot these recent lessons, and utterly failed to use their horsemen to the best advantage in reconnoitring, and that in 1877 the vaunted Russian Cossacks did nothing.

The author examines the principles of exploration that should be followed, one of which, he says, is that a body of cavalry can cover half as many miles as there are squadrons to carry it out. Is this not rather a restricted area?

Should a regiment of three squadrons only cover a mile-and-a-half of front?

The diagrams on pp. 259-260 strike us as a little old-fashioned, and it would, perhaps, have been as well to have kept to the terms advanced squadrons, main guard, etc., in present use. We quite agree with the author that one squadron is insufficient for the duties of divisional cavalry, which are many, besides those of scouting. Sir H. Colville's account of the doings of the 9th Division in South Africa shows the impotence to which such a force is reduced by the lack of well-trained light cavalry. We do not, however, aspire to emulate the Germans in sending forward *masses* of cavalry in front of an army. A re-action is setting in against this theory, as it is considered that these large bodies may be led on by a defending force, and fall a prey to infantry well ambushed. Of course it does not follow that the cavalry would be as rashly led as were ours after Dundee.

Colonel Furse warns us not to waste the experiences gained by foreign Powers in their wars. This is a tendency that we all are prone to. As a French writer has recently remarked, "*Les événements du passé lorsqu'ils ne nous touchent pas directement n'ont en général aucune influence sur le présent.*" As we have suffered from recent neglect of some of the most obvious teachings of history, let us hope that our dearly purchased direct experience may bear fruit. Yet, as Colonel Furse says, nations get war-weary, and we fear that it will take a great disaster to make us practise unceasingly that constant vigilance in peace which is requisite to ensure success in war.

The author's chapter on "moveable columns" is full of interest. He gives an account of the measures taken by Hoche in La Vendée in 1796. He directed night marches to be made by active moveable columns under experienced leaders.

Colonel Furse's remarks on the bearing of these operations on our South African experiences are apposite, and his strictures on the enormous quantities of transport taken by Sir R. Buller's columns are, no doubt, justified, as some of it might have been left in camp; but it must be borne in mind that the weight of ammunition that has now to be carried for the howitzers, field guns, etc., is very great, and that it was thought these must be carried forward to crush the Boer fire if the move against their positions was to be made. That the probable effect of our artillery fire was over-estimated we now know. Colonel Furse, however, is an expert on transport, and doubtless knows the amount of wagons necessary for the ammunition and for the supplies.

As regards flying columns, his description of Brigadier-General John Nicholson's daring march to Goolaspore, by which he defeated the mutineers at Trimmoo Ghât in 1857, and prevented their move on Delhi, and of the wondrous activity of Sir Hugh Rose in pursuit of Tantia Topee in Central India, in the massing for which special camel corps were organised, are full of interest. Towards the end of 1857 it had become customary to risk nothing, but to act according to the strict rules of war. This was taken advantage of by the Mutineers to spread all over the country. The troops of Sir H. Rose's flying columns marched thousands of miles through muddy plains and sandy deserts under an Indian sun, and suffered many privations. They had to pursue their active enemies for eight weary months before they were dispersed. As Colonel Furse himself served in the Mutiny his remarks on this remarkable campaign are especially valuable.

The examples of flying columns from the American War are most instructive. He emphasises the raids of the Confederate General Morgan and of Brigadier-General Stuart, whose fame was even more world-wide, giving some account of the celebrated General W. B. Forrest, while on the Northern side he narrates the chief exploit of General Sheridan. It is evident that de Wet must have made a study of the methods of the Confederate partisan leaders.

Colonel B. T. Mahon's march with a flying column to the relief of Mafeking and his junction with Colonel Plumer are briefly touched on.

Colonel Furse brings into the art of marching the dispositions for security. In his chapter on outposts he repeats a great many of the regulations of the Drill-Book. These seem superfluous. We think he has over-estimated the strength required, bearing in mind the weapons of to-day, and that a battalion on outpost duty can now cover a good deal more than a mile of front. He quotes Sir E. Hamley's dictum that, for better observation, the line of sentries should be the basis of the ground occupied, the piquets and supports conforming to it. We think that our recent experiences point to the line of piquets well concealed for defence being the main factor, with hidden groups few in number pushed forward, the observation being chiefly carried on by vigilant patrols. But all these arrangements must vary with the kind of country and enemy you have to deal with, his weapons and skill in their use.

The author's injunction that all the rifles of the piquet should be kept loaded seems questionable. An accidental discharge, which is likely enough, would betray the position, and cause needless alarm. This does not apply to sentries or patrols.

In his chapter on encampments, cantonments, etc., the author very rightly insists upon no tents being pitched or baggage unloaded, until the front and flanks are covered by outposts, and gives brief accounts of the surprise of Colonel Greathead's column at Agra in 1857, and at McNeil's zareeba in 1885 as instances. Here, again, the author quotes largely from the regulations, adding, however, many shrewd remarks of his own, which from his experience of warfare and habits of observation and thought, claim attention.

Colonel Furse says that in tropical countries tents are a necessity. He is not in favour of bivouacking when close to the enemy, as its constant practice seriously affects the health of the troops, but cantoning is then inadmissible owing to the greater difficulty of conveying orders and assembling the troops for action. He thinks some sort of a portable tent the best solution of the difficulty. He quotes Captain de Biensan to the effect that bivouacking is ruinous to the horses.

As a work of reference on war, and especially on marches, Colonel Furse's book is likely to become a standard one, especially from its numerous and excellent examples from military history.

We think it would, however, have been of even more use to officers generally had its bulk and weight been less. Perhaps the author might see his way to publishing a smaller and lighter edition, omitting everything that is to be found in the regulations, which might give him the opportunity of adding details of the most notable marches made in the Boer War, in addition to those given.

In places the book is somewhat discursive, but on the whole it is a very valuable addition to the author's series of instructive volumes, and we strongly recommend its study by all officers.

The Naval Annual, 1901. Portsmouth: Griffin & Co. Price 21s.

We can heartily congratulate Mr. Leyland on the present issue of the "Naval Annual," which contains much interesting and valuable matter. Among the essays is one by Lord Brassey on the "Manning of the Navy and Mercantile Marine," and with much that he says on this important subject we agree, but we doubt very much if the Royal Navy can ever be made a nursery for the Merchant Service, however the latter may be for the Navy, as far as supplying a certain number of Reservists goes. But by far the most interesting and valuable of the occasional papers in the current issue is that under the heading "Some Notes on Naval Strategy," by Captain R. H. S. Bacon, D.S.O., who bids fair to become one of our foremost writers on strategic and tactical questions. Vice-Admiral Sir Cyprian Bridge contributes a thoughtful paper on "War and its Chief Lesson"; while Mr. Hurd's paper on "The Past Five Years of War-ship Building," and Commander Robinson's on "The Operations of our Naval Forces on Shore, 1899-1901," as well as Mr. Thursfield's on the "Naval Manœuvres of last year," will all repay reading. There is room for improvement in both the tables and plans of ships, as there are blunders in both which detract from their value; but on

the whole the new edition of the "Annual" maintains the high standard of its predecessors.

All the World's Fighting Ships, 1901. By F. T. JANE. London: W. Clowes & Sons.

In his new edition for this year of his "All the World's Fighting Ships," Mr. Jane has produced probably the most valuable work of reference with regard to war-ships which has yet been published. The pains that have been taken to make the work complete are infinite, and the author is to be most heartily congratulated on the result, which reflects the greatest credit on him. It is a pity, however, that in his natural desire to be ahead of other people he should have been too previous in his description of the three new battle-ships of this year's programme, as in their dimensions and armament he has gone seriously wrong. The opinions he has elicited from various distinguished naval officers of all countries on "Submarine Boats" and which are the "Six Best Types of Battle-ships," are very interesting reading, as is also the "Year's Progress in Guns, Armour, Torpedoes, and Signalling." Mr. Jane certainly deserves to win success by his book, and we hope he is doing so.

PRINCIPAL ADDITIONS TO LIBRARY DURING AUGUST, 1901.

Handbook of the French Army. Revised by Major N. B. BARNARDISTON. Prepared in the Intelligence Division of the War Office. Demy 12mo. London, 1901.

Drill Regulations of the German Field Artillery, 1899. Revised in the Intelligence Division, War Office, by Major J. H. V. CROWE, R.A. Official. Demy 12mo. London, 1901.

L'Expédition d'Egypte, 1798-1801. Etat-Major de l'Armée—Section Historique. By Capitaine C. de la JONQUIÈRE. Vols I. and II. 8vo. Paris, 1901.

Annual Report of the Minister of Mines for the year ending 31st December, 1900. British Columbia. 8vo. Victoria, B.C., 1901.

Twentieth Annual Report. Parts III., IV., and VII., 1898-1899. United States Geological Survey. Demy 4to. Washington, 1900.

Handbook of the Armies of Sweden and Norway. Prepared in the Intelligence Division of the War Office, by Major J. H. V. CROWE, R.A. Demy 12mo. London, 1901.

Naval Commissioners, 1660-1760, with Historical Notices by Sir G. F. Duckett, Bt. By Sir GEORGE JACKSON, Bt. 8vo. London, 1889.

Original Documents relating to the Hostages of John, King of France, and the Treaty of Breigny, in 1369. Edited by Sir G. F. DUCKETT, Bt. 8vo. London, 1896.

INSTANTANEOUS PHOTOGRAPHS AT THE AUSTRIAN NAVAL MANŒUVRES.



1.—Bow View of the Coast-defence Battle-ship "BUDA-PEST" steaming full speed and cleared for action.



2.—Stern View of a sister-ship, the "MONARCH," also cleared for action and at full speed.